



Cisco Unified Communications Solutions Ordering Guide

User Connect Licensing for Cisco Unified Communications Manager 8.5(1),

Cisco Unified Computing System (“UC on UCS”)

Cisco 7800 Series Media Convergence Servers

Cisco Emergency Responder 8.5

Cisco Unified Enterprise Attendant Console 8.0

Cisco Unified Business Attendant Console 8.0

Cisco Unified Department Attendant Console 8.0

Cisco Intercompany Media Engine 8.0

Cisco Unified Communications Manager Session Management Edition 8.5

November 1, 2010

Pricing Inquiries

For further information, questions, and comments please email the appropriate contact from the list below:

Field and Channel Partner Forum at <http://www.myciscocommunity.com>

Cisco® Unified Communications Manager, Cisco Unified Communications Manager Session Management Edition,
Cisco Intercompany Media Engine - ucmanager-pm-team@cisco.com

Cisco Unified Computing System

- Pricing, Ordering, Roadmap questions (internal only): ask-uc-on-ucs@cisco.com, ask-ucs-pm@cisco.com
- Technical questions (internal only): ask-ucs-tme@cisco.com

Cisco 7800 Series Media Convergence Servers

- Internal Pricing, Ordering, Roadmap questions: mcs-pm-team@cisco.com
- Internal Fulfillment, Technical questions: mcs-team@cisco.com

Cisco Emergency Responder - er-pm-team@cisco.com

Cisco Enterprise/Business/Department Attendant Console - ipphone-pm-team@cisco.com

Cisco Unified Workspace Licensing (UWL) - cuhl-support@cisco.com

Cisco User Connect Licensing (UCL)

- Cisco internal and Partner support via community at
<https://www.myciscocommunity.com/community/partner/collaboration/licensing>

Contents

Pricing Inquires	2
1. Introduction	4
1.1 Purpose, Audience, and Scope.....	4
1.2 Ordering and Quoting Tools.....	6
1.3 Orderability and First Customer Shipment (FCS)	9
1.4 Cisco Unified Workspace Licensing.....	10
1.5 Change History	10
2. Tips for Using This Ordering Guide	12
2.1 Tips for Cisco Unified Communications Manager and Cisco MCS 7800.....	12
2.2 Managing Transactions, Fulfillment, and Delivery	12
3. Cisco Unified Communications Manager	15
3.1 Upgrades and Migrations	26
3.2 Cisco Unified Communications Manager Upgrades for Cisco TelePresence or Video-Only Deployments	34
3.3 Add-on Users	35
3.4 Non-Production Systems (NPS).....	36
4. Cisco Unified Computing System (“UC on UCS”)	38
4.1 General Information	38
4.2 New Systems	40
4.3 Component Changes on Existing Hardware	50
5. Cisco MCS 7800 Media Convergence Servers	53
5.1 General Information	53
5.2 New Hardware	56
5.3 Component Changes on Existing Hardware	59
5.4 Server Migrations	64
6. Cisco Emergency Responder 8.0	65
6.1 Cisco Emergency Responder Release 8.0 Highlights	65
6.2 New Systems	65
6.3 Additional User Licenses.....	67
6.4 Upgrades.....	67
6.5 Non-Production Systems (NPS), Also Known As “Not For Resale” (NFR)	68
7. Cisco Unified Enterprise, Business, & Department Attendant Consoles.....	69
7.1 New Systems	69
7.2 Add-ons.....	70
7.3 Upgrades.....	70
7.4 Migrations	70
7.5 Platforms for Servers/Clients	70
7.6 Non-Production Systems (NPS), Also Known As “Not For Resale” (NFR)	72
8. Cisco Unified Communications Manager Session Management Edition	73
8.1 New Systems	73
8.2 Upgrades and Migrations	74
8.3 Add-ons.....	76
8.4 Non-production Systems	76
9. Cisco Unified Communications Software Subscription (UCSS)	77
9.1 Cisco Unified Communications Manager UCSS	78
9.2 Cisco MCS 7800 Media Convergence Servers.....	78
9.3 Cisco Emergency Responder UCSS	83
9.4 Cisco Enterprise, Business, & Department Attendant Consoles UCSS.....	83
9.5 Cisco Unified Communications Manager Session Management Edition UCSS	84
10. Cisco Services	86
10.1 Cisco Unified Communications Services	86
10.2 Cisco Unified Communications Services - Tools for Quoting and Ordering.....	86
11. Cisco Capital Financing	87
11.1 Removing Sales Barriers:	87
11.2 Tips for Taking Advantage of Financing to Accelerate and Close More Business:.....	87
11.3 For More Information About Cisco Capital Financing, Visit:.....	87

1. Introduction

1.1 Purpose, Audience, and Scope

This document describes the pricing, packaging structure, and ordering for Cisco® Unified Communications Manager 8.5, Cisco 7800 Series Media Convergence Server (latest models/generations only), Cisco Emergency Responder 8.5, Cisco Unified Enterprise Attendant Console 8.0, Cisco Unified Business Attendant Console 8.0, Cisco Unified Department Attendant Console 8.0, Cisco Intercompany Media Engine 8.0 and Cisco Unified Communications Manager - Session Management Edition 8.5 as extensions to the Cisco Unified Communications System Release 8.5.

Audience - Cisco field and Cisco Unified Communications specialized channel partners

Scope - This ordering guide describes the pricing and ordering for the following products:

Cisco Unified Communications Manager 8.5

Cisco Unified Computing System for Cisco Unified Communications

Cisco 7800 Series Media Convergence Servers - shipping models/generations packaged either as:

- “Bare-metal” hardware with a separate software media kit
- Factory-preloaded Cisco Unified Communications Manager appliances
- Software-only equivalents

Cisco Emergency Responder 8.5

Cisco Unified Enterprise Attendant Console 8.0

Cisco Unified Business Attendant Console 8.0

Cisco Unified Department Attendant Console 8.0

Cisco Intercompany Media Engine 8.0

Cisco Unified Communications Manager Session Management Edition 8.5

For more detailed information about Cisco Unified Communications products, go to the following URLs:

- Cisco Unified Communications
 - <http://www.cisco.com/go/unifiedworkspace>
 - <http://www.cisco.com/go/unified-techinfo>
- Cisco Unified Communications Manager
 - <http://www.cisco.com/en/US/products/sw/voicesw/ps556/index.html>
 - http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/tsd_products_support_series_home.html
(Cisco.com ID login required)
- Cisco Unified Computing System
 - <http://www.cisco.com/en/US/netsol/ns1067/index.html>
 - <http://www.cisco.com/go/ucs> (server datasheets and documentation)
 - <http://www.cisco.com/go/uc-virtualized>
 - <http://www.vceportal.com>
 - <http://www.cisco.com/go/iaas>

<http://www.cisco.com/go/usd>

- Cisco 7800 Series Media Convergence Servers
<http://www.cisco.com/en/US/products/hw/voiceapp/ps378/index.html>
http://www.cisco.com/en/US/partner/products/hw/voiceapp/ps378/tsd_products_support_series_home.html
http://www.cisco.com/en/US/products/hw/voiceapp/ps378/products_data_sheets_list.html (server datasheets)
- Cisco Emergency Responder
<http://www.cisco.com/en/US/products/sw/voicesw/ps842/index.html>
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps842/tsd_products_support_series_home.html
- Cisco Unified Enterprise/Business/Department Attendant Console
<http://www.cisco.com/en/US/products/ps7282/index.html>
http://www.cisco.com/en/US/partner/products/ps7282/tsd_products_support_series_home.html
- Cisco Intercompany Media Engine
<http://www.cisco.com/en/US/products/ps10669/index.html>
- Cisco Unified Communications Manager Session Management Edition
<http://www.cisco.com/en/US/products/ps10661/index.html>
- Cisco Unified Communications Software Subscription (UCSS)
<http://www.cisco.com/go/ucss>
http://www.cisco.com/web/partners/sell/technology/ipc/integrated-solutions/Unified_Communications_Software_Subscription.html
- Cisco Services Ordering Guide
http://www.cisco.com/en/US/partner/products/svcs/ps2961/ps2664/serv_group_home.html

1.2 Ordering and Quoting Tools

Ordering Guides on Cisco.com and Partner Central: Starting with Cisco Unified Communications 6.1, this ordering guide is posted to a portal of ordering guides for all products in the portfolio. See <http://www.cisco.com/go/unified-techinfo>, pick the Technical Information Site for the Cisco Unified Communications system release of interest, and under Resource Library you will find an Ordering Guide link that links to Partner Central. Partner Central also contains a Sales Resources link at http://www.cisco.com/web/partners/sell/technology/ipc/integrated-solutions/ip_telephony.html. You can also check http://www.cisco.com/web/partners/sell/technology/ipc/uc_tech_readiness.html#~7.

Solution Expert assists Cisco field and Cisco Unified Communications specialized channel partners in designing and quoting solutions using the Cisco Unified Workspace Licensing or the traditional design model. For additional information about Solution Expert, including supported products, go to: <http://www.cisco.com/go/sx>.

Netformx DesignXpert is a third-party application used to configure and quote the Cisco UCS B-Series. For additional information about DesignXpert, go to <http://www.cisco.com/go/designxpert>. DesignXpert contains two “advisor” modules that UC field teams should know about:

- **Cisco UC Advisor** - a designing and quoting solution that uses the same rules as Solution Expert. It is used to quote Cisco UCS B-Series Blade Servers ordered as Collaboration SKUs. Other UCS B-series components must be configured via UCS Advisor below.
- **Cisco UCS Advisor** - a designing and quoting solution for all Cisco UCS B-Series components ordered as Data Center SKUs, including Blade Servers, Cisco UCS 5100 Blade Server Chassis, Cisco UCS 2100 Fabric Extender, and Cisco UCS 6100 Fabric Interconnect Switch.

"UCS ATP" partners can access training materials for Netformx DesignXpert at <http://www.ciscoprc.com> and <http://design.netformx.com/cp>. Look under SALES→Pricing and Ordering. Titles will contain "UCS", "UC on UCS", "Unified Computing System" or "Netformx".

QuoteBuilder is a Commercial solutions quoting application that enables specialized channel partners to build a system quote for Security, Wireless, and Unified Communications with:

- Products, required modules, and software
- Auto-derived services based on products and installed-site location
- Customized leasing options from Cisco CapitalSM, where available
- Design documentation

For additional information about QuoteBuilder, including supported products, go to:
<http://www.cisco.com/go/quotebuilder>.

Cisco Configuration Tool is part of the suite of Internet Commerce Tools for managing online ordering of Cisco products. It enables you to configure products and view lead times and prices for each selection. It also allows you to view lead time and price changes under a variety of price lists and service contract terms. You can then save, print, email, and download your configurations. Cisco Configuration Tool is also known as Dynamic Configuration Tool (DCT).

The Cisco.com (with password required) version of Cisco Configuration Tool is located at:
<http://www.cisco.com/en/US/partner/ordering/index.shtml>.

The Cisco Unified Communications products are supported by the Cisco Configuration Tool, with the exception of the Cisco MCS 7828 and Cisco MCS 7828 service spares.

For further assistance on Unified Communications Software Subscription quotation or ordering, please email the UCSS Support team at ucss-support@external.cisco.com.

Cisco Service Contract Center is an integrated solution that makes it easy for Cisco service sales teams and partners to manage and grow their service business profitably. It will:

- Quote and book your service orders and manage your service contracts and renewals, all with one simple, easy-to-use solution
- Spend less time solving administrative problems, searching for opportunities, and creating quotes
- Spend more time growing your business using data you can trust; you don't need to spend time fixing or verifying data
- Enable you to create and proactively manage your contracts

Here is the link: <http://www.cisco.com/public/scc/index.html>.

Cisco Unified Communications Manager Capacity Tool is a design assistance tool used to select appropriate hardware and deployment models for Cisco Unified Communications Manager based on the customer's deployment particulars. The capabilities of the tool are included in Solution Expert to support greenfield deployments, but for nongreenfield deployments such as solution upgrades, capacity expansion, or addition of adjunct products, use of this separate tool is currently required.

This tool is located at <http://www.cisco.com/cgi-bin/CT/PGWCT/ct.cgi> (Cisco.com ID login required) and uses content from the Solution Reference Network Design guides located at <http://www.cisco.com/go/srnd>.

Cisco Unified Communications Manager Sizing Tool

The new [Cisco Unified Communications Sizing Tool](#) (Unified CST) is now available. Cisco Unified CST delivers hardware sizing for complex Enterprise Unified Communications solutions, including Cisco Unified Contact Center Enterprise (Unified CCE). Cisco Unified CST is ideal for new or existing deployments, supporting Cisco Unified Communications System Releases 5.1 or later.

An easily navigable GUI, auto-save capability, and the ability to copy and share solutions facilitate complex solution sizing. Simply enter input parameters once and the tool automatically adjusts to the effect on other affected solution components. Cisco Unified CST outputs update in real-time when inputs change, enabling you to view changes instantaneously. CPU and memory usage displays allow you to tweak sizing for optimal server quantities. Cisco Unified CST has no deployment model or size constraints, supporting an unlimited number of endpoints and customer locations.

Cisco Unified CST is available to Cisco employees and Cisco Unified Communications specialized partners. Experience the Cisco Unified Communications Sizing Tool at: <http://tools.cisco.com/cucst>.

1.3 Orderability and First Customer Shipment (FCS)

The following are orderable November 1, 2010:

- Cisco Unified Computing System servers
 - Cisco UCS B200 M2 Blade Server, Tested Reference Configuration 1
 - Cisco UCS C210 M2 General-Purpose Rack-mount Server, Tested Reference Configurations 1 and 2
 - Cisco UCS C200 M2 General-Purpose Rack-mount Server, Tested Reference Configuration 1
- Cisco 7800 Series Media Convergence Servers
 - Cisco MCS 7816-I5
 - Cisco MCS 7825-I5
 - Cisco MCS 7828-I5
 - Customer-provided (Software-only) IBM x3250-M3 (exact match for Cisco MCS 7825-I5)

The following are orderable November 16, 2010:

- Cisco Unified Communications Manager 8.5
 -

The following are orderable December 6, 2010:

- Cisco Emergency Responder 8.5
- Cisco Unified Enterprise Attendant Console 8.0
- Cisco Unified Business Attendant Console 8.0
- Cisco Unified Department Attendant Console 8.0
- Cisco Intercompany Media Engine 8.0
- Cisco Unified Communications Manager Session Management Edition 8.5

The following are already orderable and shipping as of the date of this ordering guide.

- Cisco Media Convergence Servers as bare-metal, Cisco Unified Communications Manager 8.5 Appliances and Software-only equivalents (where indicated)
 - Cisco MCS 7835-I3
 - Cisco MCS 7845-I3
 - Customer-provided (Software-only) HP DL320-G5p (exact match for Cisco MCS 7825-H4) or HP DL380G6 (single-quad core E5504-CPU and single-quad core E5540-CPU variants)

- Customer-provided (Software-only) IBM x3650-M2 (exact match for Cisco MCS 7835-I3 or MCS 7845-I3)
- Starting in January 2010, all HP MCS 7800 models are End of Sale

First Customer Shipment (FCS) date of 8.5 is November 30, 2010.

1.4 Cisco Unified Workspace Licensing

Cisco Unified Workspace Licensing (UWL) is an ordering method for customers and their users to realize the total value of Cisco Unified Communications applications in one package. Cisco Unified Workspace Licensing provides the licensing, access rights, and application software on a per-user basis for many other Cisco Unified Communications applications.

As an alternative to the ordering method described in this ordering guide, the products may also be ordered as a part of Cisco Unified Workspace Licensing. Please refer to the Cisco Unified Workspace Licensing website and ordering guide to determine if this is the right solution for your customer:

http://www.cisco.com/web/partners/downloads/partner/WWChannels/technology/ipc/downloads/cuwl_ordering_guide.pdf.

The following products are sold as part of Cisco UWL:

- Cisco Unity® Unified Messaging
- Cisco Unity Connection
- Cisco Unified MeetingPlace® conferencing
- Cisco Unified MeetingPlace Express
- Cisco Unified Personal Communicator
- Cisco IP Communicator
- Cisco Unified Video Advantage
- Cisco Unified Presence
- Cisco Unified Mobile Communicator
- Cisco Unified Mobility Advantage
- Cisco Unified Communications Manager (Please see the Cisco Unified Communications Manager ordering guide)
- Cisco Unified Contact Center Express

Note: Cisco Emergency Responder is not sold as part of Cisco UWL.

1.5 Change History

Table 1 provides a brief overview of the major changes in the versions of this guide.

Table 1. Overview of Major Changes in Versions

Publication Date	Major Changes Compared to Previous Release
May 22, 2008	Initial Version
Jan 8, 2009	Updates for Unified CM 6.1(3) and MCS 7800 changes, integration of content from Guide to Cisco Unified CM Upgrades and Server Migrations
Feb 28, 2009	<ul style="list-style-type: none"> • Added content for Cisco Unified Enterprise Attendant Console. • Added missing Cisco Unified Communications Manager 4.3 software SKU's for MCS 7800 • Updated MCS 7800 positioning • Added where to find Ordering Guides posted to cisco.com and Partner Central • Added content for MCS 7816-I4, 7825-H4, 7825-I4

May 1, 2009	<ul style="list-style-type: none"> Updates for Unified CM 7.1(2), MCS 7800 changes, Licensing and UCSS clarifications/updates, UC NFR, upgrade clarifications, hardware lifespan/support clarifications, Electronic License Delivery (eLD)
Aug 21, 2009	<ul style="list-style-type: none"> Corrected some SKUs for 7.1(2) Misc. edits to fulfillment, non-production, MOH, services on servers
Oct 1, 2009	<ul style="list-style-type: none"> Add MCS 7835-I3, 7845-I3, DL380G6 Add CUCM 6.1(4), CUCM 7.1(3), CER 7.1 Remove End of Sale software releases
Feb 1, 2010	<ul style="list-style-type: none"> Update MCS 7800 (HP OEM exit, End of Sale updates) Add CUCM 7.1(5), 8.0(1), CIME, CUCM-SME, CER 8.0, CUxAC 8.0 Add User Connect Licensing
Apr 1, 2010	<ul style="list-style-type: none"> Add UC on UCS and CIME for 8.0(2)
May 1, 2010	<ul style="list-style-type: none"> Updated MCS 7800 and CIME, added Hotel Adjunct License
May 21, 2010	<ul style="list-style-type: none"> Added UC on UCS C210 M1 Added VMware fulfillment tips
July 27, 2010	<ul style="list-style-type: none"> Updated for UC 8.0(3) – UCS C210 M1 Reference Configurations 2 and 3, VMware clarifications, Export Unrestricted, B-series procedures, CER updates
Nov 1, 2010	<ul style="list-style-type: none"> Updated for UC 8.5(1) – UCS B200/C210/C200 M2, MCS 7816/25/28-I5, UCL updates for apps

2. Tips for Using This Ordering Guide

There are several tips that can help you use this ordering guide effectively and simplify the quoting and ordering of Cisco Unified Communications products.

Each product line has its own chapter in the ordering guide:

Chapter Product

- Cisco Unified Communications Manager - 8.5(x)
- Cisco Unified Computing System (supported models, generations, and configurations)
- Cisco 7800 Series Media Convergence Servers
- Cisco Emergency Responder 8.5
- Cisco Unified Enterprise/Business/Department Attendant Console 8.0
- Cisco Intercompany Media Engine 8.0
- Cisco Unified Communications Manager Session Management Edition 8.5

Separate ordering guides have been produced for the following:

- Cisco Unified Workspace Licensing (UWL)
- Cisco Unified Communications Manager Business Edition
- Cisco Unified IP Phones
- Cisco Unified Application Environment
- Cisco Services

There are separate sections for Cisco Unified Software Subscriptions (UCSS), Cisco Services, and Cisco Capital Financing at the end of this ordering guide as well.

2.1 Tips for Cisco Unified Communications Manager and Cisco MCS 7800

Before ordering either of these products, ensure you know the following:

- Is this a new system or upgrade to an existing system?
- Is this a production or non-production system?
- Is customer using Cisco MCS 7800 hardware from Cisco or providing customer's own certified hardware?
- What version of Cisco Unified Communications Manager is desired? If upgrading, what are the from/to versions, and do they span Major Releases or not?
- Will software licensing be via Cisco UWL or "a la carte"?
- If upgrading, will customer keep existing hardware "as-is", or use existing hardware with upgraded RAM/disk, or migrate to new, different and/or better servers?
- What is customer's services coverage? (Cisco SMARTnet® support, ESW, etc.)
- What is customer's strategy/coverage to get new Cisco Unified Communications Manager releases? (UCSS vs. Cisco Unified Communications Manager upgrade SKUs vs. repurchasing new Cisco Unified Communications Manager version)

2.2 Managing Transactions, Fulfillment, and Delivery

Here are some tips to help account teams manage customer orders beyond booking to shipment, after which deployment can begin.

- Help with Unified Workspace Licensing orders - use the cuwl-support@cisco.com alias.
- **Resolving orders on New Product Hold (NPH)** - Start at <https://www.cisco.com/cgi-bin/Software/FormManager/formgenerator.pl?fid=10520> and then consult the product management alias for the affected product. NPH for Cisco Unified Communications Manager appliances is often due to one of the following:
 - Cisco Manufacturing process requirements - All new SKUs are automatically placed on NPH until enough inventory exists to cover backlog and required inspections are complete. Note that manufacturing has required “blackouts” at certain fiscal quarters and at year end, and that may delay lifting of NPH. You can check mcs-team@cisco.com to verify for Cisco MCS 7800 servers or appliances.
 - Promotional SKU bundled with Cisco Unified Communications Manager software that requires NPH. Consult product management aliases to verify.
- **Where to get Software Images** - i.e. receiving a DVD or file containing the software image needed for the install or upgrade:
 - Use Product Upgrade Tool (PUT) at <http://www.cisco.com/upgrade> for Major and Minor Release install images, and upgrade images that span Major Releases. These images are available only on DVD.
 - Use Software Center <http://www.cisco.com/kobayashi/sw-center/sw-voice.shtml> for all upgrade images that don't span Major Releases. These images are available as software downloads or on DVD.
- **Where to get Software License files** - Product Authorization Keys (PAKs) ship with the media kits for an order. These must be submitted at <http://www.cisco.com/go/license> to be converted into license files that must be uploaded to the Cisco software products. Electronic License Delivery (eLD) is currently available worldwide. eLD emails PAKs to a designated email address instead of sending them with the media kits. Where available, eLD-specific SKUs will be enumerated in the ordering tools.
- **Where to get VMware software if purchased from Cisco** – Customer will be shipped a paper document by Cisco containing license agreement, license key and an activation URL with instructions on how to activate the license key at vmware.com. Customer visits vmware.com, activates the key, and is then entitled to download software images, media, documentation, and activate/run the software using the license key.
- **Lead Times, Inventory, and Effects on Orderability**
 - **Expediting lead time** - Product management cannot perform expedites. All expedites must be requested of and performed by Customer Service at cs-support@cisco.com, or <http://wwin-tools.cisco.com/Sales/WWExp/createNew.wwexp?method=goStartDetails&solcatId=&menu=20&subMenu>.
 - Lead Times are volatile and based on constantly changing supply/demand vs. current order backlog vs. BU forecast. Typical lead times for Cisco MCS 7800 servers are 3-4 weeks but will vary. Some examples of supply/demand factors that affect lead times are below:
 - Seasonality - Expect higher demand during end of fiscal quarter/year.
 - Customer purchasing behavior - For example, the Cisco Unified Communications Manager 7.0 take rate was much higher than was historically expected for a .0 release. This rate was therefore much higher than forecast, and our inventories decreased faster than expected for the servers that could support Cisco Unified Communications Manager 7.0.
 - Manufacturing process - A new SKU may be on NPH pending completion of required manufacturing processes. If this situation occurs during a required manufacturing blackout during fiscal quarter/year end, then lead times will be affected.
 - Server turnover - As OEM servers approach the end of their lifecycle, it becomes harder to replenish inventory quickly because server vendors start ramping down their production lines.

- If server lead time is a concern for customer success or condition of business, you should compare Cisco MCS 7800 and SW-only equivalents direct from the server vendors to see what provides the best ship date.
- If inventories become limited, you will see lead times pushed out as Cisco Manufacturing adjusts shipment scheduling to be in line with supply capabilities. The Lead Times Tool will provide insight into expected lead times for newly booked orders.
- If lead times become a field/partner/customer problem, Cisco Manufacturing and the BU will temporarily disable orderability of the affected SKUs to prevent the backlog from further increasing and making the problem worse. This situation can happen prior to the official End-of-sale date of the SKU. During the interim, the BU will recommend redirecting orders to alternative products. This redirection is usually temporary until the supply/demand problem is resolved. Suggested actions:

Check orderability status in Dynamic Configuration Tool or Multi-Line Configurator. SKUs that are nonorderable prior to their official End-of-Sale date are probably experiencing a supply/demand problem.

For orderability questions about Cisco MCS 7800, post to mcs-pm-team@cisco.com. For lead-time questions about Cisco MCS 7800, post to mcs-team@cisco.com.
- To check lead times prior to ordering, use Lead Times Tool at:
<http://www.cisco.com/en/US/partner/ordering/index.shtml>.
- Questions about lead times for Cisco MCS 7800 should be posted to mcs-team@cisco.com. The manufacturing contacts on this alias, not BU product management, are usually the ones who can answer these questions.
- If your lead time is too long to meet customer requirements, then see previous instructions for “Expediting lead times”.
- To shorten lead time on Software Licenses, use Electronic License Delivery (see the rest of this ordering guide for the products that support this option).

3. Cisco Unified Communications Manager and Cisco Intercompany Media Engine

This section provides instructions for the following order scenarios:

- **New Systems for Production**, i.e., a new purchase of Cisco Unified Communications Manager or Cisco Intercompany Media Engine software, either on approved customer-provided hardware or with an appropriate Cisco MCS 7800 Media Convergence Server.
- **Upgrades and Migrations**, i.e., of hardware and/or software in an existing System.
- **Non-Production Systems**, i.e., for use with labs, demos, etc.

A Note About Electronic License Delivery

Cisco now offers Electronic License Delivery (eLD) on many license SKUs worldwide. You will know which SKUs are designated for eLD by the SKU description as well as the SKU itself, which has an 'L-' designation. For example, the eLD SKU for 10 Device License Units is L-CM-DL-10=, whereas the same license SKU for physical delivery is LIC-CM-DL-10=.

Where possible, it is strongly encouraged to use eLD SKUs rather than physical-delivery SKUs. Please refer to the eLD website for a review of the benefits of eLD for customers, partners, and Cisco:

<http://www.cisco.com/web/tswed/edelivery/pilot/edelivery.html>.

Important Notes on Hardware/Software Compatibility

New hardware generations and new software releases leap-frog each other in time.

For newest software support on existing or older servers, IPCBU tries to go back approximately 3 years from software release FCS for server model/generation support.

For newest hardware support on existing or older software releases, IPCBU tries to go back approximately 3 years from hardware FCS, but only for the latest or "tip" release of each major release.

Actual compatible hardware/software lists may be a larger or smaller set than these targets, based on market needs, sustaining costs, native hardware/OS incompatibilities, and resource availability. Do not expect every software release to work on every server model.

- **New Hardware Example:** Cisco MCS 7825-I4 FCS was in February 2009; it supports Cisco Unified Communications Manager 7.1, 6.1, and 4.3, but not 3.3-4.2, 5.0, 6.0, or 7.0 because these models are either not "tip" releases or too far along in their End-of-Life milestones.
- **New Software Example:** Cisco Unified Communications Manager 7.0(1) FCS was in September 2008; it supports Cisco MCS 7825-I3, MCS 7825-I2, MCS 7825-I1, and MCS 7825-I3.0, but no earlier model generations because they are too old, they are incompatible with the latest software/OS versions, or no resources are available to support.

Important Notes on Software Release Lifespan

Because lifecycle status is often a purchasing consideration, we include some reference information here.

- Hardware and Software releases have separate life spans, separate End-of-Life policies, and separate End-of-Sale/End-of-Support announcements. Carefully read an announcement because it will be for either hardware or software, not both. See the End-of-Life portal at:
http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_eol_notices_list.html.

- Cisco Unified Communications Manager release introduction is event-based, not time-based. IPCBU targets approximately 18 months between major releases (e.g., 6.0 vs. 7.0) and a minor release (e.g., 6.1, 7.1) approximately 6 months after FCS of the major release (e.g., 6.0, 7.0). End of Sale of a Major Release is indexed to FCS of the Minor Release (e.g., End of Sale of 6.0 indexed to FCS of 6.1). End of Sale of Minor releases is indexed to FCS of the designated replacement release (e.g., End of Sale of 5.1 was indexed to FCS of 6.0 and 7.0). All dates and frequencies may be sooner or later than these targets based on needs of customers and the business.
- A Major or Minor Release End-of-Software-Maintenance date (also called End of Engineering) is typically 1 year after End of Sale of Software Release FCS. At this point no more security updates, bug fixes, or new hardware enablement is performed for that release. For Windows releases, this policy also means no more security updates, bug fixes, or new hardware enablement on the Windows 2000 or Windows 2003 IP Telephony OS.
- End of Support for a major or minor release is typically 3 years after software release End of Sale, or 2 years after software release End of Software Maintenance.
- All of these timeframes should be considered as targets when planning. Actual dates will vary because of needs of customers and the business.

New Systems for Production

This section covers greenfield deployments, or expansion of an existing deployment by adding cluster node(s).

To include Unified Communications Software Subscription (UCSS) with an order, see the UCSS section of this ordering guide as well as http://www.cisco.com/web/partners/sell/technology/ipc/integrated-solutions/Unified_Communications_Software_Subscription.html.

To order the **Cisco Unified Workspace Licensing** portion of your new production system order, do the following:

Follow the instructions in the “Ordering Guide for Cisco Unified Workspace Licensing”:

http://www.cisco.com/web/partners/downloads/partner/WWChannels/technology/ipc/downloads/cuwl_ordering_guide.pdf.

Server or appliance hardware to run this software must be purchased separately. Please see this ordering guide’s chapters on “UC on UCS” and “MCS 7800”.

Alternatively, if you want to use **User Connect Licensing**, the other option for ordering Cisco Unified Communications Manager 7.1(5) or 8.5(1), do the following:

In the Dynamic Configuration Tool, start with the “top-level” part number CUCM-USR-LIC.

Determine appropriate number of user licenses according to tables below. There is a minimum order quantity of fifty (50) Enhanced or Basic IP Users for User Connect Licensing. User Connect Licensing for the following categories of users are added at this step:

- a. IP Users (Enhanced or Basic)
- b. Essential Users (also Application-Only Users)
- c. Public-Space Users
- d. Mobility Users (Unified Mobility, aka Mobile Connect, also known as Single Number Reach (SNR))
- e. Video Users

Select Call-Control Options

Add appropriate UCSS options per user. UCSS is strongly encouraged with User Connect Licensing. A-la-carte upgrade options have changed significantly with User Connect Licensing.

Finally, if you are ordering a **TelePresence or Video-only** deployment, you use a different set of User Connect Licensing SKUs.

Each of these steps is described in more detail below. Product part numbers and prices are included for your reference.

User Connect Licenses can be combined with Cisco Unified Workspace Licenses (UWL) on the same cluster. If they are combined, however, UCSS must be ordered for all users on that cluster. User Connect Licenses may not be added to an existing Cisco UWL cluster without the required UCSS for the new users.

Cisco Unified Communications Software Subscription is recommended with a new a-la-carte production system. Refer to the UCSS section of this guide for corresponding product part numbers and prices. UCSS is a subscription product that entitles customers to major software version upgrades when linked to an active Cisco Unified Essential Operate Services (ESW) service contract. Customers who purchase UCSS receive major software version upgrades at no additional charge for the duration of the subscription.

Factory Installation: In general, newly purchased Cisco Unified Communications Manager and Cisco Intercompany Media Engine appliances ship with a factory install of the latest maintenance release or rebuild. For example, at First Customer Shipment of Version 8.5(1) of either product, all ordered DVDs and factory-installed Cisco MCS 7800 appliances will ship with 8.5(1), but later they may ship with 8.5(1b), 8.5(2), etc. Cisco Software Center will continue to provide download files for earlier releases.

Starter Licenses: a production fresh install of Version 6.0 or higher is out-of-the-box licensed for 1 node and 50 DLUs. A nonproduction NFR or LAB fresh install of Version 7.0 or later has a starter license of 3 nodes and 150 DLUs. Starter licenses are not available after any kind of software upgrade. See the Cisco Unified Communications System Guide for more details about licensing.

Note: Any VMware installation of Cisco Unified Communications Manager also has a starter license of 3 nodes and 150 DLUs, but Cisco does not provide any support for a VMware deployment for customer/partner production or lab use for versions prior to 8.0. Production support for VMware installations of Cisco Unified Communications Manager on Version 8.0 and greater are limited to installations to Cisco Unified Computing System (UCS) hardware only. No additional licenses can be added to the starter license in a VMware installation.

When Migrating from Versions 3.3 - 4.3 to 6.0/7.0, ensure that you have all devices configured and licenses loaded prior to upgrading so you can get the proper number of DLUs.

Promotional Products: Certain versions ship with free promotional licenses, such as for Cisco Unified Presence, Cisco Unified Contact Center Express Edition, Cisco Unified Operations Manager, or others. These orders are for licenses only, and the products may not be installed co-resident with Cisco Unified Communications Manager; their own server is required. They also may not be upgraded if the Cisco Unified Communications Manager is upgraded; they must be purchased first. Consult the product manager of those products for more details.

Cisco Unified Communications Manager versions not shown below are End of Sale at the time of this writing, and are no longer available for purchase either for a new deployment or for expansion of an existing deployment.

For customers who are migrating from Cisco Unified Communications Manager Business Edition to Cisco Unified Communications Manager, see the Ordering Guide for Cisco Unified Communications Manager Business Edition for instructions.

Cisco Intercompany Media Engine is a feature of Cisco Unified Communications Manager and Cisco Unified Communications Manager Session Management Edition, and thus the ordering of UCL will also include steps to select the right platform to run the Cisco IME feature.

User Connect Licensing Ordering Instructions

Step 1. In the Dynamic Configuration Tool (DCT), start with the “top-level” part number matching the Cisco Unified Communications Manager version you want (Table 2).

Table 2. “Top-level” Part Number for ordering Cisco Unified Communications Manager (Unified CM) and Cisco Intercompany Media Engine

Product Number	Description	List Price (\$US)	UCSS Orderable?
CUCM-USR-LIC	Unified Connect Licensing - Top Level part Number For Ordering 8.0 Systems	\$0	See tables below

Select the above Top-Level part number (CUCM-USR-LIC) to order a new 8.5 system licensing and media.

Step 2. Order appropriate number of users from Tables 3 through 5. Note: Each order requires a minimum of 50 Telephony Licenses, as indicated below.

Tiered Pricing

New with Unified Communications Manager 8.5 is tiered User Connect Licensing for UCM and tiered UCSS for UCM. Tiered pricing is a pricing change allowing for economies of scale when ordering Unified Communications Manager – historically, these economies of scale were built in with server based pricing and tiered pricing simply maintains the economies of scale.

There are three pricing tiers for Unified Communications Manager and UCSS for UCM. Prices are detailed below in this ordering guide.

1. 1-999 users
2. 1,000-9,999 users
3. 10,000 and greater

When ordering UCM and UCSS for UCM, tiered options will be presented based on the combined total number of Enhanced, Basic and Essential users PER configuration. Volume tiers will not apply to any other number of users such as the total number of users in a company or across a number of separate orders. Therefore, it is important to understand and communicate that tiered pricing only applies on a per order basis.

Tiered pricing is not applicable to any other Unified Communications products or Unified Workspace Licensing (CUWL).

Telephony and Mobility Licenses

Note: Each order requires a minimum of 50 users. 50 users must consist of a mix of LIC-CUCM-USR (tier A, B or C) and LIC-CUCM-BASIC (tier A, B or C).

- **Enhanced IP User License** - Entitles the user to use of a single endpoint of any make or model, including a hard phone and Soft phone from Cisco or a third party. The Enhanced IP User License also entitles Mobile Connect for a user who has a mobile client (dual mode or Cisco Unified Mobile Communicator) or any third-party mobile solution. Any user with a mobile client or third-party mobile solution requires an Enhanced UCL.

- **Basic IP User License** - Entitles the user to use of one (1) Basic Cisco IP Endpoint, currently Cisco Unified IP Phone 6911 and 6921 models. Basic IP User License also entitles Mobile Connect for a user who does not have any mobile client (dual mode or Cisco Unified Mobile Communicator) or any third-party mobile solution.

Note: One UCL can cover multiple mobile devices with mobile connect for the same user.

Table 3 lists the telephony and mobility User Connect licenses.

Table 3. Telephony and Mobility User Connect Licenses

Product Number	Description	List Price (\$US)	UCSS Orderable?
LIC-CUCM-USR-A	UCL - 1 EnhancedUser, Tier A, 1-999 users	\$210	Y
LIC-CUCM-USR-B	UCL - 1 EnhancedUser, Tier B, 1,000-9,999 users	\$195	Y
LIC-CUCM-USR-C	UCL - 1 EnhancedUser, Tier C, 10,000 and greater users	\$190	Y
LIC-CUCM-BASIC-A	UCL - 1 Basic User, Tier A, 1-999 users	\$125	Y
LIC-CUCM-BASIC-B	UCL - 1 Basic User, Tier B, 1,000-9,999 users	\$110	Y
LIC-CUCM-BASIC-C	UCL - 1 Basic User, Tier C, 10,000 and greater users	\$105	Y

Essential, and Public-Space Licenses

- **Essential User License** - Entitles one Cisco Unified IP Phone 6901, Fax Machine, or other analog device like conference phone, modem, etc.
 - Note : Essential License was formerly known as Analog/App Only License.
- **Public Space** –This Add-on license, licenses one IP Phone for lobby, conference room or other public area. That is not associated with a particular user.

Table 4 lists the add-on, Essential, and public-space User Connect licenses.

Table 4. Add-on, Essential, and Public-Space Connect Licenses

Product Number	Description	List Price (\$US)	UCSS Orderable?
LIC-CUCM-ESS-A	UCL -- 1 Essential, or an Application User add-on The Application Only license provides a user with a user profile in the CUCM system	\$40	Y
LIC-CUCM-ESS-B	UCL -- 1 Essential, or an Application User add-on The Application Only license provides a user with a user profile in the CUCM system	\$25	Y
LIC-CUCM-ESS-C	UCL -- 1 Essential, or an Application User add-on The Application Only license provides a user with a user profile in the CUCM system	\$20	Y
PUBLIC-IP-DEV-ADD	UCL -- 1 Public Space Phone, non-app phone add-on for UCL for lobby and conference room phones	\$150	Y

Video and TelePresence Licenses

Determine the number of users who will use a Video Endpoint or a Soft client in addition to their Enhanced or Basic User License. Determine the number of users who will have a Cisco TelePresence™ Desktop Video Device. Determine the number of Single- and multiple-Screen TelePresence rooms.

Definitions:

- Adjunct License - licenses an existing Enhanced or Basic user for one assigned audio or video endpoint or soft client such as Cisco IP Communicator or Cisco Unified Personal Communicator. Note: Mobile Communicator licensing is covered as part of Cisco Unified Mobility Advantage.
- Hotel Adjunct License – licenses a hotel guest room with an existing Enhanced or Basic license for one additional audio or video endpoint. Note: Hotel Adjunct Licenses are available solely for the deployment in hotel guest rooms and are not to be used for hotel administration or back office functions, in hotel common areas or outside of the hotel industry.
- Desktop Video License - licenses users for one video endpoint or soft client not connected to Cisco Unified Video Advantage or Cisco Personal Communicator.
- TelePresence Single Screen - is a license you purchase in lieu of a Basic or Enhanced license. It is for any conference room-based TelePresence endpoint with a single screen.
- TelePresence Multiple Screen - is a license you purchase in lieu of a Basic or Enhanced license. It is for any conference room-based TelePresence endpoint with more than one screen.

Table 5 lists the video and TelePresence User Connect licenses.

Table 5. Video and TelePresence User Connect Licenses

Product Number	Description	List Price (\$US)	UCSS Orderable?
LIC-ADJ-USR-AUDVID	UCL - Adjunct License for 1 User Assigned Audio or Video Cisco Endpoint, Softclient.	\$85	N
LIC-ADJ-USR-HOTEL	UCL – Adjunct License for 1 Hotel Guest Room Assigned Audio or Video Endpoint.	\$ 50	N
LIC-VID-TP-DKTP	UCL - Video Licensing for 1 User (in addition to UCM UCL): Telepresence desktop video device	\$295	Y
LIC-TP-SGL-SRN	UCL - 1 User Video Licensing: Telepresence single screen conference room or office unit in lieu of UCM UCL	\$650	y
LIC-TP-MULT-SRN	UCL: Telepresence Multi Screen conference room or office unit in lieu of UCM UCL	\$1,100	Y

Step 3. Select one of the required Call-Control Options and one of the required Cisco Intercompany Media Engine options (Table 6) for each node in your Cisco Unified Communications Manager cluster. Each node must have these options, and each option must correspond to the server class that the node runs on. This selection will deliver appropriate node licensing. For UC on UCS, select the Call-Control Option that corresponds to MCS 7845.

The US export unrestricted options (“-XU” suffix) differ from the other options in that these versions of CUCM will not encrypt signaling or media and that these versions can NOT ever be upgraded to a US export restricted version of CUCM. These US export unrestricted options are provided to ease the burden on customers in foreign countries who are subject to US export controls. They may also satisfy foreign import regulations in some countries (e.g. Russia). Cisco employees may consult Global Export Trade for more information. Cisco channel partners may consult their account team for assistance.

Table 6. Required Options for different hardware platforms

Product Number	Description	List Price (\$US)	Number of Nodes	UCSS Orderable?
Call-Control Options for Cisco Unified Communications Manager 8.5 and 7.1(5)				
UCM-7816-85	CUCM 8.5 7816	\$0	0 to 15	N
UCM-7825-85	CUCM 8.5 7825	\$0	0 to 15	N
UCM-7835-85	CUCM 8.5 7835	\$0	0 to 15	N

UCM-7845-85	CUCM 8.5 7845	\$0	0 to 15	N
CUCM-UCS-7500-85	CUCM 8.5 - For UC on UCS 7500 user VM	\$0	0 to 15	N
CUCM-UCS-2500-85	CUCM 8.5 - For UC on UCS 2500 user VM	\$0	0 to 15	N
CUCM-UCS-1000-85	CUCM 8.5 - For UC on UCS 1000 user VM	\$0	0 to 15	N
UCM-7816-85-XU	CUCM 8.5 7816, Export Unrestricted	\$0	0 to 15	N
UCM-7825-85-XU	CUCM 8.5 7825, Export Unrestricted	\$0	0 to 15	N
UCM-7835-85-XU	CUCM 8.5 7835, Export Unrestricted	\$0	0 to 15	N
UCM-7845-85-XU	CUCM 8.5 7845, Export Unrestricted	\$0	0 to 15	N
UCM-7816-71	CUCM 7.1 7816	\$0	0 to 15	N
UCM-7825-71	CUCM 7.1 7825	\$0	0 to 15	N
UCM-7835-71	CUCM 7.1 7835	\$0	0 to 15	N
UCM-7845-71	CUCM 7.1 7845	\$0	0 to 15	N
UCM-7816-71-XU	CUCM 7.1 7816, Export Unrestricted	\$0	0 to 15	N
UCM-7825-71-XU	CUCM 7.1 7825, Export Unrestricted	\$0	0 to 15	N
UCM-7835-71-XU	CUCM 7.1 7835, Export Unrestricted	\$0	0 to 15	N
UCM-7845-71-XU	CUCM 7.1 7845, Export Unrestricted	\$0	0 to 15	N
Call Control Options for Cisco Intercompany Media Engine 8.0				
IME-7825-85	IME 8.5 7825	\$0	0 to 5	N
IME-7845-85	IME 8.5 7845	\$0	0 to 5	N

Step 4. Add appropriate UCSS options per user. UCSS is available for most of the User Connect License types.
 (Optional, but strongly recommended)

Continue with the top-level part number CUCM-USR-LIC (tier A, B or C) to add UCSS to a configuration of User Connect Licensing. Alternatively, UCSS can be purchased under L-UCSS-UCM top level part number, providing electronic delivery.

Use tables 7 and 8 to add appropriate UCSS per-user subscriptions based on the term you desire..

Table 7. UCSS for UCL (Paper Delivery)

Top Level CUCM-USR-LIC	Description	List Price (\$US)
UCSS for LIC-CUCM-USR		
UCSS-UCM-1-1-A	UCSS for 1 User for 1 year, tier A	\$12.00
UCSS-UCM-2-1-A	UCSS for 1 User for 2 years, tier A	\$21.00
UCSS-UCM-3-1-A	UCSS for 1 User for 3 years, tier A	\$26.00
UCSS-UCM-5-1-A	UCSS for 1 User for 5 years, tier A	\$42.00
UCSS-UCM-1-1-B	UCSS for 1 User for 1 year, tier B	\$9.00
UCSS-UCM-2-1-B	UCSS for 1 User for 2 years, tier B	\$16.00
UCSS-UCM-3-1-B	UCSS for 1 User for 3 years, tier B	\$22.00
UCSS-UCM-5-1-B	UCSS for 1 User for 5 years, tier B	\$35.00
UCSS-UCM-1-1-C	UCSS for 1 User for 1 year, tier C	\$5.00
UCSS-UCM-2-1-C	UCSS for 1 User for 2 years, tier C	\$9.00
UCSS-UCM-3-1-C	UCSS for 1 User for 3 years, tier C	\$13.00

Top Level CUCM-USR-LIC	Description	List Price (\$US)
UCSS-UCM-5-1-C	UCSS for 1 User for 5 years, tier C	\$21.00
UCSS for LIC-CUCM-BASIC		
UCSS-UCM-BAS-1-1-A	UCSS for 1 User for 1 year, tier A	\$7.00
UCSS-UCM-BAS-2-1-A	UCSS for 1 User for 2 years, tier A	\$12.00
UCSS-UCM-BAS-3-1-A	UCSS for 1 User for 3 years, tier A	\$15.00
UCSS-UCM-BAS-5-1-A	UCSS for 1 User for 5 years, tier A	\$25.00
UCSS-UCM-BAS-1-1-B	UCSS for 1 User for 1 year, tier B	\$5.00
UCSS-UCM-BAS-2-1-B	UCSS for 1 User for 2 years, tier B	\$9.00
UCSS-UCM-BAS-3-1-B	UCSS for 1 User for 3 years, tier B	\$12.00
UCSS-UCM-BAS-5-1-B	UCSS for 1 User for 5 years, tier B	\$20.00
UCSS-UCM-BAS-1-1-C	UCSS for 1 User for 1 year, tier C	\$3.00
UCSS-UCM-BAS-2-1-C	UCSS for 1 User for 2 years, tier C	\$5.00
UCSS-UCM-BAS-3-1-C	UCSS for 1 User for 3 years, tier C	\$7.00
UCSS-UCM-BAS-5-1-C	UCSS for 1 User for 5 years, tier C	\$12.00
UCSS for LIC-CUCM-ESS		
UCSS-UCM-ESS-1-1-A	UCSS for 1 User for 1 year, tier A	\$3.00
UCSS-UCM-ESS-1-2-A	UCSS for 1 User for 2 years, tier A	\$6.00
UCSS-UCM-ESS-1-3-A	UCSS for 1 User for 3 years, tier A	\$7.00
UCSS-UCM-ESS-1-5-A	UCSS for 1 User for 5 years, tier A	\$11.00
UCSS-UCM-ESS-1-1-B	UCSS for 1 User for 1 year, tier B	\$2.00
UCSS-UCM-ESS-1-2-B	UCSS for 1 User for 2 years, tier B	\$4.00
UCSS-UCM-ESS-1-3-B	UCSS for 1 User for 3 years, tier B	\$5.00
UCSS-UCM-ESS-1-5-B	UCSS for 1 User for 5 years, tier B	\$8.00
UCSS-UCM-ESS-1-1-C	UCSS for 1 User for 1 year, tier C	\$1.00
UCSS-UCM-ESS-1-2-C	UCSS for 1 User for 2 years, tier C	\$2.00
UCSS-UCM-ESS-1-3-C	UCSS for 1 User for 3 years, tier C	\$3.00
UCSS-UCM-ESS-1-5-C	UCSS for 1 User for 5 years, tier C	\$5.00
UCSS for PUBLIC-IP-DEV-ADD		
UCSS-PUB-1-1	UCSS for 1 User for 1 year	\$11.00
UCSS-PUB-2-1	UCSS for 1 User for 2 years	\$19.00
UCSS-PUB-3-1	UCSS for 1 User for 3 years	\$23.00
UCSS-PUB-5-1	UCSS for 1 User for 5 years	\$39.00
UCSS for LIC-VID-TP-DKTP		
UCSS-TP-DTP-1M-1	UCSS for 1 User for 1 month	\$3.00
UCSS-TP-DTP-1-1	UCSS for 1 User for 1 year	\$29.00
UCSS-TP-DTP-2-1	UCSS for 1 User for 2 years	\$50.00
UCSS-TP-DTP-3-1	UCSS for 1 User for 3 years	\$61.00
UCSS-TP-DTP-5-1	UCSS for 1 User for 5 years	\$102.00
UCSS for LIC-TP-SGL-SRN		
UCSS-TP-SGL-1M-1	UCSS for 1 User for 1 month	\$6.00
UCSS-TP-SGL-1-1	UCSS for 1 User for 1 year	\$65.00
UCSS-TP-SGL-2-1	UCSS for 1 User for 2 years	\$111.00
UCSS-TP-SGL-3-1	UCSS for 1 User for 3 years	\$137.00
UCSS-TP-SGL-5-1	UCSS for 1 User for 5 years	\$228.00
UCSS for LIC-TP-MULT-SRN		

Top Level CUCM-USR-LIC	Description	List Price (\$US)
UCSS-TP-SGL-1M-1	UCSS for 1 User for 1 month	\$10.00
UCSS-TP-MULT-1-1	UCSS for 1 User for 1 year	\$110.00
UCSS-TP-MULT-2-1	UCSS for 1 User for 2 years	\$187.00
UCSS-TP-MULT-3-1	UCSS for 1 User for 3 years	\$231.00
UCSS-TP-MULT-5-1	UCSS for 1 User for 5 years	\$385.00

For detailed UCSS options, refer to "Cisco Unified Communications Software Subscription (UCSS)".

Table 8. UCSS for UCL (Electronic Delivery)

Top Level L-UCSS-UCM	Description (eDelivery)	List Price (\$US)
UCSS for LIC-CUCM-USR-A		
L-UCSS-UCM-1M-1	UCSS for 1 User for 1 month, tier A	\$1.00
L-UCSS-UCM-1-1-A	UCSS for 1 User for 1 year, tier A	\$12.00
L-UCSS-UCM-2-1-A	UCSS for 1 User for 2 years, tier A	\$21.00
L-UCSS-UCM-3-1-A	UCSS for 1 User for 3 years, tier A	\$26.00
L-UCSS-UCM-5-1-A	UCSS for 1 User for 5 years, tier A	\$42.00
L-UCSS-UCM-1M-1	UCSS for 1 User for 1 month, tier B	\$1.00
L-UCSS-UCM-1-1-B	UCSS for 1 User for 1 year, tier B	\$9.00
L-UCSS-UCM-2-1-B	UCSS for 1 User for 2 years, tier B	\$16.00
L-UCSS-UCM-3-1-B	UCSS for 1 User for 3 years, tier B	\$22.00
L-UCSS-UCM-5-1-B	UCSS for 1 User for 5 years, tier B	\$35.00
L-UCSS-UCM-1M-1	UCSS for 1 User for 1 month, tier C	\$1.00
L-UCSS-UCM-1-1-C	UCSS for 1 User for 1 year, tier C	\$5.00
L-UCSS-UCM-2-1-C	UCSS for 1 User for 2 years, tier C	\$9.00
L-UCSS-UCM-3-1-C	UCSS for 1 User for 3 years, tier C	\$13.00
L-UCSS-UCM-5-1-C	UCSS for 1 User for 5 years, tier C	\$21.00
UCSS for LIC-CUCM-BASIC		
L-UCSS-BAS-1M-1	UCSS for 1 User for 1 month	\$1.00
L-UCSS-UCMBAS-1-1-A	UCSS for 1 User for 1 year, tier A	\$7.00
L-UCSS-UCMBAS-2-1-A	UCSS for 1 User for 2 years, tier A	\$12.00
L-UCSS-UCMBAS-3-1-A	UCSS for 1 User for 3 years, tier A	\$15.00
L-UCSS-UCMBAS-5-1-A	UCSS for 1 User for 5 years, tier A	\$25.00
L-UCSS-BAS-1M-1	UCSS for 1 User for 1 month	\$1.00
L-UCSS-UCMBAS-1-1-B	UCSS for 1 User for 1 year, tier B	\$5.00
L-UCSS-UCMBAS-2-1-B	UCSS for 1 User for 2 years, tier B	\$9.00
L-UCSS-UCMBAS-3-1-B	UCSS for 1 User for 3 years, tier B	\$12.00
L-UCSS-UCMBAS-5-1-B	UCSS for 1 User for 5 years, tier B	\$20.00
L-UCSS-BAS-1M-1	UCSS for 1 User for 1 month	\$1.00
L-UCSS-UCMBAS-1-1-C	UCSS for 1 User for 1 year, tier C	\$3.00
L-UCSS-UCMBAS-2-1-C	UCSS for 1 User for 2 years, tier C	\$5.00
L-UCSS-UCMBAS-3-1-C	UCSS for 1 User for 3 years, tier C	\$7.00
L-UCSS-UCMBAS-5-1-C	UCSS for 1 User for 5 years, tier C	\$12.00
UCSS for LIC-CUCM-ESS		
L-UCSS-UCM-ESS-1M	UCSS for 1 User for 1 month, tier A	\$1.00
L-UCSS-UCMESS1-1-A	UCSS for 1 User for 1 year, tier A	\$3.00
L-UCSS-UCMESS1-2-A	UCSS for 1 User for 2 years, tier A	\$6.00

Top Level L-UCSS-UCM	Description (eDelivery)	List Price (\$US)
L-UCSS-UCMESS1-3-A	UCSS for 1 User for 3 years, tier A	\$7.00
L-UCSS-UCMESS1-5-A	UCSS for 1 User for 5 years, tier A	\$11.00
L-UCSS-UCM-ESS-1M	UCSS for 1 User for 1 month, tier B	\$1.00
L-UCSS-UCMESS1-1-B	UCSS for 1 User for 1 year, tier B	\$2.00
L-UCSS-UCMESS1-2-B	UCSS for 1 User for 2 years, tier B	\$4.00
L-UCSS-UCMESS1-3-B	UCSS for 1 User for 3 years, tier B	\$5.00
L-UCSS-UCMESS1-5-B	UCSS for 1 User for 5 years, tier B	\$8.00
L-UCSS-UCM-ESS-1M	UCSS for 1 User for 1 month, tier C	\$1.00
L-UCSS-UCMESS1-1-C	UCSS for 1 User for 1 year, tier C	\$1.00
L-UCSS-UCMESS1-2-C	UCSS for 1 User for 2 years, tier C	\$2.00
L-UCSS-UCMESS1-3-C	UCSS for 1 User for 3 years, tier C	\$3.00
L-UCSS-UCMESS1-5-C	UCSS for 1 User for 5 years, tier C	\$5.00
UCSS for PUBLIC-IP-DEV-ADD		
L-UCSS-PUB-1M-1	UCSS for 1 User for 1 month	\$1.00
L-UCSS-PUB-1-1	UCSS for 1 User for 1 year	\$11.00
L-UCSS-PUB-2-1	UCSS for 1 User for 2 years	\$19.00
L-UCSS-PUB-3-1	UCSS for 1 User for 3 years	\$23.00
L-UCSS-PUB-5-1	UCSS for 1 User for 5 years	\$39.00
UCSS for LIC-VID-TP-DKTP		
L-UCSS-TP-DTP-1M-1	UCSS for 1 User for 1 month	\$3.00
L-UCSS-TP-DTP-1-1	UCSS for 1 User for 1 year	\$29.00
L-UCSS-TP-DTP-2-1	UCSS for 1 User for 2 years	\$50.00
L-UCSS-TP-DTP-3-1	UCSS for 1 User for 3 years	\$61.00
L-UCSS-TP-DTP-5-1	UCSS for 1 User for 5 years	\$102.00
UCSS for LIC-TP-SGL-SRN		
L-UCSS-TP-SGL-1M-1	UCSS for 1 User for 1 month	\$6.00
L-UCSS-TP-SGL-1-1	UCSS for 1 User for 1 year	\$65.00
L-UCSS-TP-SGL-2-1	UCSS for 1 User for 2 years	\$111.00
L-UCSS-TP-SGL-3-1	UCSS for 1 User for 3 years	\$137.00
L-UCSS-TP-SGL-5-1	UCSS for 1 User for 5 years	\$228.00
UCSS for LIC-TP-MULT-SRN		
L-UCSS-TP-SGL-1M-1	UCSS for 1 User for 1 month	\$10.00
L-UCSS-TP-MULT-1-1	UCSS for 1 User for 1 year	\$110.00
L-UCSS-TP-MULT-2-1	UCSS for 1 User for 2 years	\$187.00
L-UCSS-TP-MULT-3-1	UCSS for 1 User for 3 years	\$231.00
L-UCSS-TP-MULT-5-1	UCSS for 1 User for 5 years	\$385.00

For detailed UCSS options, refer to "Cisco Unified Communications Software Subscription (UCSS)".

User Connect Licensing Ordering Instructions for TelePresence or Video-Only Deployments

Starting from the 8.0 release you can order a TelePresence Starter Bundle that delivers Cisco Unified Communications Manager software, 2 Node Licenses, and Licensing for 50 TelePresence users (a quantity of 50 "LIC-VID-TP-DKTP" Licenses). Please note that these licenses are not for Single-Screen or Multiple-Screen TelePresence Licenses.

Step 1. In the Dynamic Configuration Tool (DCT), start with the "top-level" part number CUCM-TP-STRTR-BNDL.

Step 2. . Select one of the required Call-Control Options and one of the required Cisco Intercompany Media Engine options (Table 6) for each node in your Cisco Unified Communications Manager cluster. Each node must have these options, and each option must correspond to the server class that the node runs on. This selection will deliver appropriate media and node licensing.

Table 9. Required Options for different hardware platforms

Product Number	Description	List Price (\$US)	Number of Nodes	UCSS Orderable?
Call-Control Options				
UCM-7816-85	CUCM 8.5 7816	\$0	2	Y
UCM-7825-85	CUCM 8.5 7825	\$0	2	Y
UCM-7835-85	CUCM 8.5 7835	\$0	2	Y
UCM-7845-85	CUCM 8.5 7845	\$0	2	Y
Cisco Intercompany Media Engine Options				
IME-7825-85	IME 8.5 7825	\$0	0 to 5	N
IME-7845-85	IME 8.5 7845	\$0	0 to 5	N

Step 3. UCSS, though optional, is highly recommended. . To order UCSS for “TelePresence Starter Bundle”, select the top-level product number “UCSS-UCM” or “L- UCSS-UCM” in Table 11. (Select L-UCSS-UCM Product if you want electronic delivery).

Table 10. UCSS Top-Level SKUs

Product Number	Description	List Price (\$US)
UCSS-UCM	UCSS - Top Level part Number For Ordering 8.5 Systems	\$0
L-UCSS-UCM	UCSS - Top Level part Number For Ordering 8.5 Systems for Electronic Delivery	\$0

Step 4. Select the appropriate quantity (50 for the Starter Bundle) and the appropriate UCSS term, as depicted in Table 12.

Table 11. UCSS Options for the TelePresence Starter Bundle

UCSS for LIC-VID-TP-DKTP		
UCSS-TP-DTP-1M-1	UCSS for 1 User for 1 month	\$3.00
UCSS-TP-DTP-1-1	UCSS for 1 User for 1 year	\$29.00
UCSS-TP-DTP-2-1	UCSS for 1 User for 2 years	\$50.00
UCSS-TP-DTP-3-1	UCSS for 1 User for 3 years	\$61.00
UCSS-TP-DTP-5-1	UCSS for 1 User for 5 years	\$102.00

If you selected L-UCSS-UCM, the UCSS options are depicted in Table 13.

Table 12. Table 13 Electronic Delivery (UCSS) options for the TelePresence Starter Bundle

UCSS for LIC-VID-TP-DKTP		
L-UCSS-TP-DTP-1M-1	UCSS for 1 User for 1 month	\$3.00
L-UCSS-TP-DTP-1-1	UCSS for 1 User for 1 year	\$29.00
L-UCSS-TP-DTP-2-1	UCSS for 1 User for 2 years	\$50.00
L-UCSS-TP-DTP-3-1	UCSS for 1 User for 3 years	\$61.00
L-UCSS-TP-DTP-5-1	UCSS for 1 User for 5 years	\$102.00

For detailed UCSS options, refer to “Cisco Unified Communications Software Subscription (UCSS)”.

Mobile Agent Unified Contact Center Enterprise Licensing:

Cisco Unified Contact Center Enterprise Mobile Agents do not require UCM User licenses. However,

each Unified CM cluster is required to be licensed for a minimum of 50 User Basic or Enhanced licenses, even if the CM cluster is solely supporting Mobile agents. See examples.

Examples:

1. A single Unified CM cluster is configured to support between 1-2000 Mobile Agents (no other Users will be assigned to the cluster). Order 50 Unified CM Basic or Enhanced User Licenses, which is the minimum required for a CUCM cluster.
2. A single Unified CM cluster is configured to support a mixture of 100 Mobile Agents plus 100 non-Mobile Agents. Order a total of 100 Unified CM Basic or Enhanced User Licenses for non-Mobile Agents, which meets the minimum required for a CUCM cluster.
3. A single Unified CM cluster is configured to support 60 Agents that are both Mobile and non-Mobile Agent (eg. same agent can do both, depending on the day). Order 60 Unified CM Basic or Enhanced User Licenses, which meets the requirement for the 60 agents when they are in non-Mobile Agent mode.
4. A single Unified CM cluster is configured to support a mixture of 200 Mobile Agents plus 200 non-Mobile Agents plus 200 non-contact center Users. Order a total of 400 Unified CM Basic or Enhanced User Licenses (200 Unified CM Basic or Enhanced User Licenses for non-Mobile Agents and 200 Unified CM Basic or Enhanced User Licenses for non-contact center Users).
5. A single Unified CM cluster is configured to support 25 Mobile Agents plus 100 non-contact center Users. Order a total of 100 Unified CM Basic or Enhanced User Licenses for the non-contact center Users.

3.1 Upgrades and Migrations

For general Preparation and Planning materials, see <http://www.cisco.com/go/ucmigration>, Deployment tab, link under Documentation for “Preparing for your Migration to Cisco Unified Communications Manager”.

This direction can also be stated as “Starting from Cisco Unified Communications Manager Version X on hardware A, what do I need to order to upgrade/migrate to Cisco Unified Communications Manager Version Y on hardware B?” Hardware changes may or may not be desired or required as part of the software upgrade.

This section covers the following scenarios, which are explained in more detail below:

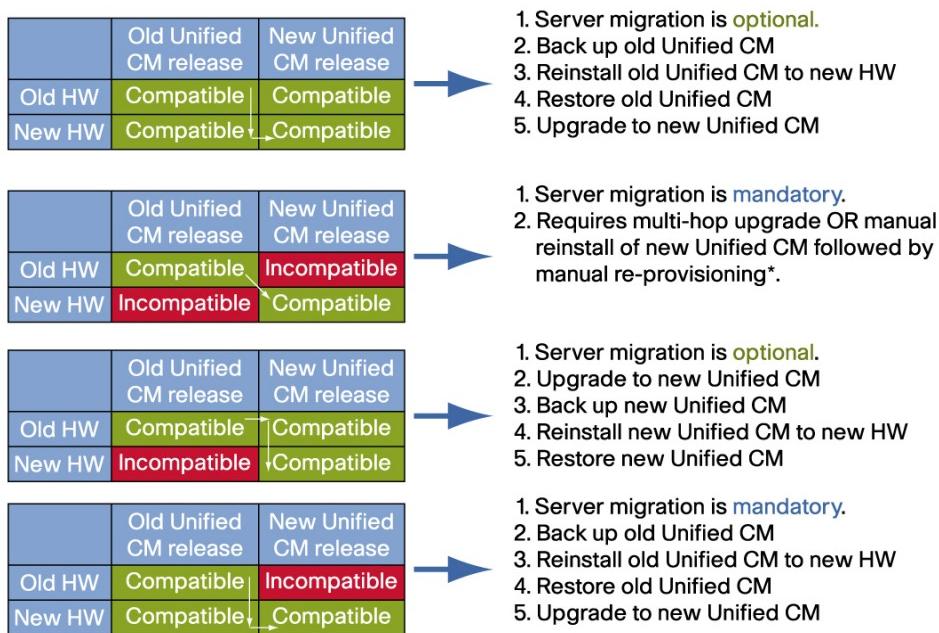
1. Server Migrations - i.e. to a new, different or better server, such as a generation change such as Cisco MCS 7825-H1 to MCS 7825-H2, model change such as Cisco MCS 7825 to MCS 7835 or Cisco MCS 7835 to MCS 7845, manufacturer change such as Cisco MCS 7835-H to MCS 7835-I etc. If you just want to replace, get a spare, or expand Rail Kits, Fans, Power Supplies, Memory, or Disk drives, see the ordering instructions for Cisco MCS 7800 Media Convergence Servers.
2. Cisco Unified Communications Manager software upgrades with users, either with or without an associated hardware change
3. Cisco Unified Communications Manager software upgrades without users, i.e., for Cisco TelePresence™ or Video-only deployments

Before making any orders for upgrades and migrations, first identify the “from” hardware and “from” Cisco Unified Communications Manager version, and the desired “to” hardware or “to” Cisco Unified Communications Manager version, depending on which one(s) you intend to change.

- The Cisco Unified Communications Manager hardware compatibility matrix at http://www.cisco.com/en/US/prod/collateral/voicesw/ps6790/ps5748/ps378/prod_brochure0900aecd8062a4f9.html will tell you if the desired “to” Cisco Unified Communications Manager version will work with your existing hardware, or if a hardware upgrade or server migration is required.
- The supported Cisco Unified Communications Manager direct upgrade paths at http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/compat/ccmcompmatr.html will tell you how many “hops” it will take to get to the desired “to” Cisco Unified Communications Manager version. Old or earlier releases may require a multihop upgrade path.

In general, most upgrades and migrations for which a direct software upgrade path exists will fall into one of the following scenarios. If a scenario says server migration is optional, a hardware upgrade (RAM or disk) may still be required to run the new Cisco Unified Communications Manager version. Figure 1 shows the server migration paths.

Figure 1. Server Migration Paths



1. Server Migrations

In this scenario, the customer desires to transfer the software licenses to a different server that may be newer, better, or otherwise different. For example:

- A “server upgrade”, such as migrating from Cisco MCS 7825 to MCS 7835, or from Cisco MCS 7835 to MCS 7845
- A manufacturer change, such as migrating from an HP model to an IBM model or vice versa
- A generation change, such as migrating from Cisco MCS 7835-H1 to MCS 7835-H2, or from Cisco MCS 7825-I2 to MCS 7825-I3
- Changing from a Cisco MCS 7800 to a Software-only equivalent, or vice versa

Server Migrations are available only for Cisco Unified CallManager 3.3(5) or later. Server Migrations may be performed only if the desired new server will work with the existing version of Cisco Unified Communications Manager; see the compatibility matrix at:

http://www.cisco.com/en/US/prod/collateral/voicesw/ps6790/ps5748/ps378/prod_brochure0900aecd8062a4f9.html.

Ensure you order the correct SKU for replacement Cisco MCS 7800 hardware.

- If you are staying on the same Cisco Unified Communications Manager release and are just migrating hardware, you should order “bare-metal” product IDs (end in -IPC1 or -IPC2) and not product IDs with other suffixes, because these will ship you factory-installed software copies.
- If you are upgrading your Cisco Unified Communications Manager release and you are migrating hardware, order the product ID corresponding to the destination Cisco Unified Communications Manager release (e.g., suffix of -CMB2 for 6.1, -CMC1 for 7.0, etc.).

Customers who are on Cisco MCS 7800 servers provided by Cisco and are migrating to another Cisco MCS 7800 provided by Cisco and want trade-in credit for the old hardware should work with their account team to see if the Cisco Technology Migration Program (TMP) applies. No trade-in is available for migrating from or to customer-provided “Software-only” hardware.

Server Migrations may require ordering a Hardware Migration SKU to cover royalties Cisco owes to its suppliers when licenses for new major releases are transferred to new hardware (Table 14).

Table 13. Server Migrations

Upgrading via...	Hardware Migration SKU Required?
UCSS	Only if migrating to a release prior to 7.1(5) or 8.0(1)
CUCM SW Upgrade SKU	Only if upgrading by <2 Major Releases and to a release prior to 7.1(5) or 8.0(1)
Re-purchase new CUCM Major Release	NO

Major releases are the first digit of the version number. E.g., a major release changes if you upgrade from 4.0 to 6.0 or later. A major release does not change if you upgrade from 6.0 to 6.1.

Examples of “<2 Major Releases” are 3.3 > 4.3, 4.2>4.3, 5.1>6.0, 6.1(2) > 6.1(3), 6.0>6.1, 6.0>7.1.

Examples:

- Hardware Migration SKU is required for:
 - Migrate to different server, no software upgrade
 - Migrate to different server, upgrade via UCSS
 - Migrate to different server, upgrade 6.0 to 6.1 via upgrade SKU
 - Migrate to different server, upgrade 6.0 to 7.1 via upgrade SKU
- Hardware Migration SKU is **not** required for:
 - Any upgrade to 7.1(5) or 8.0(1) or higher
 - Migration from MCS 7800 to UC on UCS
 - Migrate to different server, upgrade 5.0 to 7.1 via upgrade SKU or repurchase of 7.1
 - Migrate to different server, upgrade 4.0 to 6.0 or later via upgrade SKU or repurchase of 6.0 or later.
 - Keeping same server, no software upgrade
 - Keeping same server, upgrade 6.0 to 6.1 or later
 - Keeping same server, upgrade 6.0 to 7.0
 - Keeping same server, upgrade 5.0 to 7.0

To determine which Hardware Migration SKU you need, do the following:

- a. Order your replacement server as if it is a new system - see instructions in Cisco Unified Communications Manager and Media Convergence Server sections. Pay special attention to “hardware add-ons” and “component changes”.
- b. Get prefix of Hardware Migration SKU for your version of Cisco Unified Communications Manager.

- c. Get suffix of Hardware Migration SKU for your “from” (existing) and “to” (replacement) Server Classes.
- d. Order the Hardware Migration SKU corresponding to the prefix and suffix.

These steps are described in more detail below.

b. Get prefix of Hardware Migration SKU for your version of Cisco Unified Communications Manager (Table 15)

Table 14. Prefix of Hardware Migration

Unified CM Version	Hardware Migration SKU's Prefix
3.2 or earlier	Must first upgrade to Unified CM 3.3
3.3	SW-CCM-3.3-
4.0	CM4.0-K9-
4.1	CM4.1-K9-
4.2	CM4.2-K9-
4.3	CM4.3-K9-
5.0	CM5.0-K9-
5.1	CM5.1-K9-
6.0	CM6.0-K9-
6.1	CM6.1-K9-
7.0	CM7.0-K9-
7.1	CM7.1-K9-

c. Get suffix of Hardware Migration SKU for your “from” (existing) and “to” (replacement) Server Classes.

First, look up the existing and replacement servers in Table 16 to identify their Server Classes. Recall that certified Software-only equivalents are at <http://www.cisco.com/go/swonly>.

Table 15. Cisco MCS 7800 Models/Generations and Software-Only Equivalents

Server Class	MCS 7800 models/generations and Software-only equivalents In this Server Class
MCS 7815SE	<p>Any MCS for Cisco Unified CM whose SKU begins with “MCS7815”, “MCS-7815”, “MCS7816” or “MCS-7816” running one of the following:</p> <ul style="list-style-type: none"> • SW-CCM-3.3-7815SE= • CM4.0-K9-7815SE= • CM4.1-K9-7815SE1 • CM4.2-K9-7815SE • CM4.3-K9-7815I2S-1 <p>Or, any MCS for Cisco Unified CM whose SKU begins with “MCS-7815” that was purchased as part of one of the following IP Communications bundles:</p> <ul style="list-style-type: none"> • MID-MKT-IPC-A • MID-MKT-IPC-A1 <p>Or, any MCS for Cisco Unified CM whose SKU begins with “MCS-7825” that was purchased as part of one of the following IP Communications bundles:</p> <ul style="list-style-type: none"> • MID-MKT-IPC-B • MID-MKT-IPC-B1 • MID-MKT-IPC-C • MID-MKT-IPC-C1
MCS 781x	Any MCS for Cisco Unified CM whose SKU begins with “MCS7815”, “MCS-7815”, “MCS7816” or “MCS-7816” that was not purchased as part of an IP Communications Bundle (see Server Class MCS 7815SE for details).
MCS 782x	<ul style="list-style-type: none"> • Any MCS 7820, MCS 7822 or ICS 7750 • Any MCS for Cisco Unified CM whose SKU begins with “MCS7825” or “MCS-7825” that was not purchased as part of a Cisco IP Communications Bundle (see Server Class MCS 7815SE for details). • Any MCS 7828, either service spare or part of a Cisco Unified Communications Manager - Business Edition bundle • Any certified HP DL320 • Any certified IBM x306, x306m, x3250

MCS 7835	<ul style="list-style-type: none"> • Any MCS 7830 • Any MCS for Cisco Unified CM whose SKU begins with "MCS7835" or "MCS-7835" • Any certified single-CPU HP DL380 with dual CPU • Any certified single-CPU IBM x340, x342, x345, x346, x346r, x3650
MCS 7845	<ul style="list-style-type: none"> • Any MCS for Cisco Unified CM whose SKU begins with "MCS7845" or "MCS-7845" • Any certified dual-CPU HP DL380 with dual CPU • Any certified dual-CPU IBM x345, x346, x346r, x3650

Next, look up the Hardware Migration SKU suffix corresponding to your Server Classes (Table 17).

Table 16. Hardware Migration SKU Suffixes

"To"(Replacement) Server Class					
"From" (Existing) Server Class	MCS 7815SE	MCS 781x	MCS 782x	MCS 7835	MCS 7845
MCS 7815SE	-MIG0=	-MIG1=	-MIG2=	-MIG3=	-MIG4=
MCS 781x	-MIG0=	-MIG0=	-MIG5=	-MIG6=	-MIG7=
MCS 782x	-MIG0=	-MIG0=	-MIG0=	-MIG8=	-MIG9=
MCS 7835	-MIG0=	-MIG0=	-MIG0=	-MIG0=	-MIG10=
MCS 7845	-MIG0=	-MIG0=	-MIG0=	-MIG0=	-MIG0=

Order a Hardware Migration SKU for Each Server, Corresponding to the Above Prefix and Suffix.

For example, for a customer on Cisco Unified Communications Manager 3.3 who wants to migrate from a Cisco MCS 7825-H1 to a MCS 7835-H3:

- Hardware Migration SKU prefix is SW-CCM-3.3-.
- Hardware Migration SKU suffix is -MIG8=.
- The SKU to be ordered is SW-CCM-3.3-MIG8=.

For example, for a customer on Cisco Unified Communications Manager 6.1 who wants to migrate from a Cisco MCS 7835-I2 to a MCS 7835-I3:

- Hardware Migration SKU prefix is CM6.1-K9-.
- Hardware Migration SKU suffix is -MIG0=.
- The SKU to be ordered is CM6.1-K9-MIG0=.

Note that the Hardware Migration SKU is in addition to any other costs of upgrading, such as a Cisco Unified Communications Manager Upgrade SKU for customers not covered by UCSS.

Note that each server requires a Hardware Migration SKU. It is not a per-cluster or per-customer charge.

2. Cisco Unified Communications Manager Upgrades with or without Hardware Changes

Do the following:

1. Verify the existing server can support the new Cisco Unified Communications Manager version at: http://www.cisco.com/en/US/prod/collateral/voicesw/ps6790/ps5748/ps378/prod_brochure0900aec8062a4f9.html. Even if the chassis is supported, a memory or disk upgrade may be required to support the new software version. If a memory or disk upgrade is required on the existing server, follow instructions in the Media Convergence Servers section under Component Changes. If your existing server will not work with the new Cisco Unified Communications Manager version, a Server Migration as previously described will be required.
2. Verify that the direct upgrade path(s) - single or multiple hops - that you plan to use to execute the upgrade are supported by checking http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/compat/ccmcompmatr.html. If your current "from" version is not supported to upgrade to your "to" version, then a multihop upgrade path will be

- required. E.g., 6.1(3) → 8.0(1) is a single-hop direct upgrade path, but 6.1(1) requires a multihop path 6.1(1) → 6.1(3) → 8.0(1).
3. If you **are** covered by UCSS, the new Cisco Unified Communications Manager 7.1(5) or 8.0(1) version can be obtained from the Product Upgrade Tool at <http://www.cisco.com/upgrade> (see previous section Tips for Using this Ordering Guide - 8.0(1) images are available only on DVD; you cannot download them from Cisco.com). Note that all systems licensed via Cisco UWL are required to be covered by UCSS. Also note that UCSS is not available for any Cisco Unified Communications Manager Non-Production System (NFR, Lab, SDK, Internal Demo).
 4. If you **are not** covered by UCSS, then you have one of the following options. The text and tables below will provide specific information for from/to upgrade versions.

- a. (Recommended) Purchase UCSS as part of the migration to 8.0(1), and convert a la carte to User Connect Licensing via “UCL Software **Migration**” SKUs and Call-Control Option SKUs. The customer is covered by UCSS after the upgrade/migration.
- b. Do **not** purchase UCSS as part of the migration to 8.0(1), and convert a la carte to User Connect Licensing via “UCL Software **Upgrade**” SKUs and Call-Control Option SKUs. The customer is still **not** covered by UCSS after the upgrade/migration.

Cisco Unified Communications Software Subscription, or UCSS, is a subscription product that entitles customers to major software version upgrades when linked to an active Cisco Unified Essential Operate Services (ESW) service contract. Customers who purchase UCSS receive major software version upgrades at no additional charge for the duration of the subscription.

Convert to User Connect Licensing via “UCL Software Migration SKU with UCSS”

Step 1. In the Dynamic Configuration Tool (DCT), start with the “top-level” part CUCM-USR-LIC.

Step 2. Select the part numbers and the quantity of users that are to be migrated from a la carte (see Table 17).

Table 17. UCL Software Migration SKUs (UCSS required)

Product Number	Description	List Price (\$US)	UCSS Orderable?
MIG-CUCM-USR-A	Upgrade from ala carte CM to Enhanced USR, 1 User, tier A	\$3	Y
MIG-CUCM-USR-A	Upgrade from ala carte CM to Enhanced USR, 1 User, tier B	\$3	Y
MIG-CUCM-USR-A	Upgrade from ala carte CM to Enhanced USR, 1 User, tier C	\$3	Y
MIG-CUCM-BASIC-A	Upgrade from ala carte CM to basic USR, 1 User, tier A	\$3	Y
MIG-CUCM-BASIC-B	Upgrade from ala carte CM to basic USR, 1 User, tier B	\$3	Y
MIG-CUCM-BASIC-C	Upgrade from ala carte CM to basic USR, 1 User, tier C	\$3	Y
MIG-PUBLIC-IP-DEV	Upgrade from ala carte Public Space USR, 1 User	\$3	Y
MIG-VID-TP-DKTP	Upgrade from ala carte CM to TP Desktop USR, 1 User	\$3	Y
MIG-TP-SGL-SRN	Upgrade from ala carte CM to Single Screen TPUSR, 1 User	\$3	Y
MIG-TP-MULT-SRN	Upgrade from ala carte CM to Multiple Screen USR, 1 User	\$3	Y
MIG-CUCM-ESS-USR-A	Upgrade from ala carte CM to Essential USR, 1 User, tier A	\$3	Y
MIG-CUCM-ESS-USR-B	Upgrade from ala carte CM to Essential USR, 1 User, tier B	\$3	Y
MIG-CUCM-ESS-USR-C	Upgrade from ala carte CM to Essential USR, 1 User, tier C	\$3	Y

Step 3. You **must** pick one of the UCSS options listed in Table 19 to go with your UCL Software Migration SKU:

1. By default, you must purchase a mandatory 3-year UCSS.
2. Higher Education or Government customers may optionally instead choose a 1-year UCSS.
3. Any customer may optionally instead choose a 5-year UCSS.

Table 18. UCSS Options for each UCL Software Migration SKU

MIG SKU	CUCM Migration User Options	List US \$
MIG-CUCM-USR-A	Upgrade from ala carte CM to Enhanced USR, 1 User, tier A	\$3.00
UCSS-UCM-1-1-A	Only For Govt/Hr. Ed	\$12.00
UCSS-UCM-3-1-A	Mandatory Attach	\$26.00
UCSS-UCM-5-1-A	Can optionally be selected	\$42.00
MIG-CUCM-USR-B	Upgrade from ala carte CM to Enhanced USR, 1 User, tier B	\$3.00
UCSS-UCM-1-1-B	Only For Govt/Hr. Ed	\$9.00
UCSS-UCM-3-1-B	Mandatory Attach	\$20.00
UCSS-UCM-5-1-B	Can optionally be selected	\$32.00
MIG-CUCM-USR-C	Upgrade from ala carte CM to Enhanced USR, 1 User, tier C	\$3.00
UCSS-UCM-1-1-C	Only For Govt/Hr. Ed	\$5.00
UCSS-UCM-3-1-C	Mandatory Attach	\$11.00
UCSS-UCM-5-1-C	Can optionally be selected	\$18.00
MIG-CUCM-BASIC-A	Upgrade from ala carte CM to basic USR, 1 User, tier A	\$3.00
UCSS-UCM-BAS-1-1-A	Only For Govt/Hr. Ed	\$7.00
UCSS-UCM-BAS-3-1-A	Mandatory Attach	\$15.00
UCSS-UCM-BAS 5-1-A	Can optionally be selected	\$25.00
MIG-CUCM-BASIC-B	Upgrade from ala carte CM to basic USR, 1 User, tier B	\$3.00
UCSS-UCM-BAS-1-1-B	Only For Govt/Hr. Ed	\$7.00
UCSS-UCM-BAS-3-1-B	Mandatory Attach	\$15.00
UCSS-UCM-BAS 5-1-B	Can optionally be selected	\$25.00
MIG-CUCM-BASIC-C	Upgrade from ala carte CM to basic USR, 1 User, tier C	\$3.00
UCSS-UCM-BAS-1-1-C	Only For Govt/Hr. Ed	\$7.00
UCSS-UCM-BAS-3-1-C	Mandatory Attach	\$15.00
UCSS-UCM-BAS 5-1-C	Can optionally be selected	\$25.00
MIG-PUBLIC-IP-DEV	Upgrade from ala carte Public Space USR, 1 User	\$3.00
UCSS-PUB-1-1	Only For Govt/Hr. Ed	\$11.00
UCSS-PUB-3-1	Mandatory Attach	\$23.00
UCSS-PUB-5-1	Can optionally be selected	\$39.00
MIG-VID-TP-DKTP	Upgrade from ala carte CM to TP Desktop USR, 1 User	\$3.00
UCSS-TP-DTP-1-1	Only For Govt/Hr. Ed	\$29.00
UCSS-TP-DTP-3-1	Mandatory Attach	\$61.00
UCSS-TP-DTP-5-1	Can optionally be selected	\$102.00
MIG-TP-SGL-SRN	Upgrade from ala carte CM to Single Screen TPUSR, 1 User	\$3.00
UCSS-TP-SGL-1-1	Only For Govt/Hr. Ed	\$65.00
UCSS-TP-SGL-3-1	Mandatory Attach	\$137.00
UCSS-TP-SGL-5-1	Can optionally be selected	\$228.00
MIG-TP-MULT-SRN	Upgrade from ala carte CM to Multiple Screen USR, 1 User	\$3.00
UCSS-TP-MULT-1-1	Only For Govt/Hr. Ed	\$110.00
UCSS-TP-MULT-3-1	Mandatory Attach	\$231.00
UCSS-TP-MULT-5-1	Can optionally be selected	\$385.00
MIG-CUCM-ESS-USR-A	Upgrade from ala carte CM to Essential USR, 1 User, tier A	\$3.00
UCSS-UCM-ESS-1-1-A	Only For Govt/Hr. Ed	\$3.00
UCSS-UCM-ESS-1-3-A	Mandatory Attach	\$7.00
UCSS-UCM-ESS-1-5-A	Can optionally be selected	\$11.00

MIG SKU	CUCM Migration User Options	List US \$
MIG-CUCM-ESS-USR-B	Upgrade from ala carte CM to Essential USR, 1 User, tier B	\$3.00
UCSS-UCM-ESS-1-1-B	Only For Govt/Hr. Ed	\$3.00
UCSS-UCM-ESS-1-3-B	Mandatory Attach	\$7.00
UCSS-UCM-ESS-1-5-B	Can optionally be selected	\$11.00
MIG-CUCM-ESS-USR-C	Upgrade from ala carte CM to Essential USR, 1 User, tier C	\$3.00
UCSS-UCM-ESS-1-1-C	Only For Govt/Hr. Ed	\$3.00
UCSS-UCM-ESS-1-3-C	Mandatory Attach	\$7.00
UCSS-UCM-ESS-1-5-C	Can optionally be selected	\$11.00

Step 4. For each node that makes up your Cisco Unified Communications Manager cluster(s), select one of the required Call-Control Options and one of the required Cisco Intercompany Media Engine Options corresponding to the server class (Table 20). You need one of these for each node in a cluster, so you will be shipped media and node licenses for each server:

Table 19. Call-Control Options

Product Number	Description	List Price (\$US)	Number of Nodes	UCSS Orderable?
Call Control Options				
UCM-7816-85	CUCM 8.5 7816	\$0	0 to 15	N
UCM-7825-85	CUCM 8.5 7825	\$0	0 to 15	N
UCM-7835-85	CUCM 8.5 7835	\$0	0 to 15	N
UCM-7845-85	CUCM 8.5 7845	\$0	0 to 15	N
Cisco Intercompany Media Engine Options				
IME-7825-85	IME 8.5 7825	\$0	0 to 5	N
IME-7845-85	IME 8.5 7845	\$0	0 to 5	N

Convert to User Connect Licensing via “UCL Software Upgrade SKU without UCSS”

Step 1. In the Dynamic Configuration Tool (DCT), start with the “top-level” part number CUCM-USR-LIC.

Step 2. Select the part numbers and quantity of users that are to be upgraded (Table 21).

Table 20. UCL Software Upgrade SKUs (UCSS not required)

Upgrade SKU	Description	List US \$
CUCM Migration User Options		
LIC-CUCM-USR-UPG	CUCM Enhanced User License - 1 User	\$105.00
LIC-CUCM-BASIC-UPG	CUCM User License - 1 Basic User	\$63.00
LIC-CUCM-ESS-UPG	CUCM User License - 1 Essential User	\$20.00
CUCM Video and TelePresence User Licensing Upgrade		
LIC-VID-TP-DTP-UPG	Video Licensing: Telepresence desktop video device 1 user	\$147.00
LIC-TP-SGL-SRN-UPG	Video Licensing: Telepresence single screen 1 User	\$325.00
LIC-TP-MLT-SRN-UPG	Video Licensing: Telepresence multi screen conference room 1 User	\$550.00

Step 3. For each node that makes up your Cisco Unified Communications Manager cluster(s), select the appropriate Call-Control Option corresponding to the server class (Table 22). You need one of these for each node in a cluster, so you will be shipped media and node licenses for each server.

Table 21. Call-Control Options

Product Number	Description	List Price (\$US)	Number of Nodes	UCSS Orderable?
Call Control Options				

Product Number	Description	List Price (\$US)	Number of Nodes	UCSS Orderable?
UCM-7816-85	CUCM 8.5 7816	\$0	0 to 15	N
UCM-7825-85	CUCM 8.5 7825	\$0	0 to 15	N
UCM-7835-85	CUCM 8.5 7835	\$0	0 to 15	N
UCM-7845-85	CUCM 8.5 7845	\$0	0 to 15	N
Cisco Intercompany Media Engine Options				
IME-7825-85	IME 8.5 7825	\$0	0 to 5	N
IME-7845-85	IME 8.5 7845	\$0	0 to 5	N

Below are specific recommendations for combinations of “from” and “to” software versions.

From Cisco Unified Communications Manager 3.0, 4.0, 5.0, 6.0, or 7.0 to 8.0(1)

Follow the steps above to upgrade to 8.0(1) with User Connect Licensing via either UCSS, UCL Software Migration SKU with UCSS, or UCL Software Upgrade SKU without UCSS.

From Cisco Unified Communications Manager 7.0(0) or 7.1(0) to 7.1(5)

Customers already on 7.0(0) or 7.1(1-4) with valid service contracts are already entitled to download 7.1(5) from Cisco.com.

When the customer later upgrades to 8.0, follow the steps above to upgrade to 8.0(1) with User Connect Licensing via UCSS, UCL Software Migration SKU with UCSS, or UCL Software Upgrade SKU without UCSS.

From Cisco Unified Communications Manager 3.0, 4.0, 5.0, or 6.0 to 7.1(5)

Follow the steps above to upgrade to 7.1(5) with User Connect Licensing via UCSS, UCL Software Migration SKU with UCSS, or UCL Software Upgrade SKU without UCSS.

3.2 Cisco Unified Communications Manager Upgrades for Cisco TelePresence or Video-Only Deployments

Do the following:

Verify server compatibility and direct upgrade paths as with upgrades for users.

If you **are** covered by UCSS, the new Cisco Unified Communications Manager 7.1(5) or 8.0(1) version can be obtained just as with upgrades for users.

If you are **not** covered by UCSS, then do the following:

- Step 1. In the Dynamic Configuration Tool (DCT), start with the top-level part number “CUCM-TP-BNDL-UPG” with list Price of \$7,375.
- Step 2. After selecting the necessary Starter Product, select one of the Required Call Control options and one of the required Cisco Intercompany Media Engine options from Table 23 for each server in the cluster. Select the number of Nodes that make up the cluster. This selection will deliver media and node licenses for the Cisco Unified Communications Manager cluster.

Table 22. Call-Control Options for user-less deployments (Cisco TelePresence or Video-only).

Product Number	Description	List Price (\$US)	Number of Nodes	UCSS Orderable?
Call Control Options				
UCM-7816-85	CUCM 8.5 7816	\$0	2	Y
UCM-7825-85	CUCM 8.5 7825	\$0	2	Y
UCM-7835-85	CUCM 8.5 7835	\$0	2	Y

UCM-7845-85	CUCM 8.5 7845	\$0	2	Y
Cisco Intercompany Media Engine Options				
IME-7825-85	IME 8.5 7825	\$0	0 to 5	N
IME-7845-85	IME 8.5 7845	\$0	0 to 5	N

3.3 Add-on Users

After initial purchase of or migration to 8.0(1) with User Connect Licensing, you can purchase additional users to expand the deployment. The SKUs you order deliver appropriate licensing but not media (since that was already obtained from the initial purchase or migration). Do the following:

- Step 1. In the Dynamic Configuration Tool (DCT), start with the “top-level” part number CUCM-USR-LIC-ADD with list price \$0.
- Step 2. Use Table 24 to order appropriate quantity and type of Users who need to be added. This order will deliver appropriate licensing, but not media.

Table 23. Different User Licenses that can be added to an existing cluster

User Add SKU	Description	List US \$
LIC-CUCM-USR-A	CUCM Enhanced User License - 1 User, tier A	\$210.00
LIC-CUCM-USR-B	CUCM Enhanced User License - 1 User, tier B	\$195.00
LIC-CUCM-USR-C	CUCM Enhanced User License - 1 User, tier C	\$190.00
LIC-CUCM-BASIC-A	CUCM User License - 1 Basic User, tier A	\$125.00
LIC-CUCM-BASIC-B	CUCM User License - 1 Basic User, tier B	\$110.00
LIC-CUCM-BASIC-C	CUCM User License - 1 Basic User, tier C	\$105.00
LIC-CUCM-ESS-A	CUCM User License - 1 Essential User, tier A	\$40.00
LIC-CUCM-ESS-B	CUCM User License - 1 Essential User, tier B	\$25.00
LIC-CUCM-ESS-C	CUCM User License - 1 Essential User, tier C	\$20.00
PUBLIC-IP-DEV-ADD	Public Space non-app phone add-on for UCL for lobby and conference room phones	\$150.00
LIC-ADJ-USR-AUDVID	Adjunct License for Single User Assigned Audio or Video Cisco Endpoint, Softclient	\$85.00
LIC-ADJ-USR-HOTEL	Adjunct License for Single Hotel Guest Room Assigned Audio or Video Endpoint.	\$50.00
LIC-VID-TP-DKTP	Video Licensing Telepresence desktop video device	\$295.00
LIC-TP-SGL-SRN	Video Licensing: Telepresence single screen conference room or office unit	\$650.00
LIC-TP-MULT-SRN	Video Licensing: Telepresence multi screen conference room or office unit	\$1,100.00

Step 3. UCSS for add-on users is optional but highly recommended. Continue with the top-level part number CUCM-USR-LIC-ADD (tier A, B or C) to add UCSS to a configuration of User Connect Licensing. Alternatively, UCSS can be purchased under L-UCSS-UCM top level part number, providing electronic delivery plus monthly SKU if co-termination is required.

Note: In order to upgrade a Basic user License to an Enhanced User license, purchasing an Adjunct license (LIC-ADJ-USR-AUDVID) will enable that upgrade.

Optionally when adding Users customers might want to add nodes to an existing configuration, they can do so by selecting one of required Call Control Options and one of the required Cisco Intercompany Media Engine Options from Table 25 for each additional node to be added.

Table 24. Required Options when users are added and it is desired to add nodes to existing CUCM configuration.

Product Number	Description	List Price (\$US)	Number of Nodes	UCSS Orderable?
Call Control Options				
UCM-7816-85	CUCM 8.5 7816	\$0	5	Y

UCM-7825-85	CUCM 8.5 7825	\$ 0	5	Y
UCM-7835-85	CUCM 8.5 7835	\$ 0	5	Y
UCM-7845-85	CUCM 8.5 7845	\$ 0	5	Y
Cisco Intercompany Media Engine Options				
IME-7825-85	IME 8.5 7825	\$ 0	0 to 5	N
IME-7845-85	IME 8.5 7845	\$ 0	0 to 5	N

Note: For customers that have already ordered Cisco Unified Communications Manager 8.0 without previously ordering the Cisco IME Server Software, the only ways to add the Cisco IME server Software are below:

- Add the Cisco IME Server License with add-on-users as above
- Get the Cisco IME Server License from Product Upgrade Tool, assuming customer has a valid UCSS contract.

3.4 Non-Production Systems (NPS)

Non-production systems are intended for labs, demos, trials, showcases, internal course development, training, and other non-revenue-generating activities. There are four types of non-production systems with different eligibility requirements and included products.

1. Not For Resale kit (NFR)
2. Customer Lab license
3. Software Development Kit (SDK)
4. Internal Demo License

Note that UCSS is not available for any non-production system, though other options such as Cisco Unified Communications Manager upgrade SKUs are available.

1. Not For Resale kit (NFR) - This kit is available only for Cisco Unified Communications specialized Partners or learning partners for demonstration and lab purposes. See

http://www.cisco.com/web/partners/sell/promotions/uc_system_release_nfr_program.html for details on eligibility and included products.

1. If you are eligible, order an NFR SKU from Cisco Distributors.
2. Compatible/approved bare-metal hardware must be purchased separately (see section on Production Systems).
3. If you need NFR for additional products, not just Cisco Unified Communications Manager, as an alternative you can order the Cisco Unified Communications NFR SKU **UC7.1-K9-NFR** from Cisco Marketplace <http://www.cisco.com/cgi-bin/marketplace/welcome.pl> (Table 25).

Table 25. NFR SKUs

Product Number	Description	List Price (\$US)	UCSS Orderable?
CM8.5-K9-NFR	SW, CUCM 8.5, Not for Resale	\$200	No
CM7.1-K9-NFR	SW, CUCM 7.1, Not for Resale	\$200	No
CM8.5-K9-NFR-TRNG	SW, CUCM 8.5, Not for Resale - Training Partners Only	\$200	No
CM7.1-K9-NFR-TRNG	SW, CUCM 7.1, Not for Resale - Training Partners Only	\$200	No
SME8.5-K9-NFR-TRNG	SW, CUCM-SME8.0, SW for SME Server, Not for Resale,	\$200	No
SME8.5-K9-NFR	SW, CUCM-SME8.0, SW for SME Server, Not for Resale	\$200	No

2. Customer Lab License - This license is available to customers for non-production use. It contains Cisco Unified Communications Manager with 1 Node License and 100 DLUs. Note that this license cannot be converted to a production license.

1. Order the lab SKU from Table 26. Additional DLUs may be purchased.
2. Compatible/approved bare-metal hardware must be purchased separately (see section on Production Systems).

Table 26. Customer Lab SKU

Product Number	Description	List Price (\$US)	UCSS Orderable?
CM8.5-K9-LAB	SW, Unified CM, 100 DLUs, Lab system only	\$995	No
CM7.1-K9-LAB	SW, Unified CM, 100 DLUs, Lab system only	\$995	No
SME8.5-K9-LAB	SW, CUCM-SME SW, 100 DLUs, SW for SME Server, Lab system only	\$995	No

Software Development Kit (SDK) - Customer/partner developers should order either the Lab License or the Cisco Unified Application Environment.

Internal Demo License (DEMO) - Order the Lab License.

4. Cisco Unified Computing System (“UC on UCS”)

4.1 General Information

For general information on Cisco Unified Computing System, see <http://www.cisco.com/go/ucs>.

For general information on Cisco Unified Communications support of the Cisco Unified Computing System (UCS), see <http://www.cisco.com/go/swonly> and <http://www.cisco.com/go/uc-virtualized>.

For B-Series Blade Server hardware End of Sale and End of Life, please see http://www.cisco.com/en/US/products/ps10280/prod_eol_notices_list.html.

For C-series General-Purpose Rack-Mount Server hardware End of Sale and End of Life, please see http://www.cisco.com/en/US/products/ps10493/prod_eol_notices_list.html.

For End of Sale and End of Life of Tested Reference Configurations for Cisco Unified Communications, see http://www.cisco.com/en/US/products/hw/voiceapp/ps378/prod_eol_notices_list.html

Note that hardware and software End of Sale have different dates and different timeframes.

Latest and greatest supported models/generations as of November 1, 2010 are as follows:

- Cisco UCS B200 M2 Blade Server, Tested Reference Configuration 1
- Cisco UCS B200 M1 Blade Server, Tested Reference Configuration 1
- Cisco UCS C210 M2 General-Purpose Rack-Mount Server, Tested Reference Configurations 1 and 2
- Cisco UCS C210 M1 General-Purpose Rack-Mount Server, Tested Reference Configurations 1,2 and 3
- Cisco UCS C200 M2 General-Purpose Rack-Mount Server, Tested Reference Configuration 1

All Reference Configurations are as defined at www.cisco.com/go/swonly on the “Cisco Unified Computing System servers” page.

Please see the data sheets at <http://www.cisco.com/go/ucs>.

Most UCS server offers may be purchased as either Collaboration SKUs or Data-Center SKUs. **For reference, here is a “decoder ring” for Collaboration UCS SKUs:**

Part Number syntax is **UCS-xxxxyy-VCzz**.

- It is sufficient to use only UCS wxxxx to completely describe a Unified Computing System server model/generation, e.g., “UCS B200M1” or “UCS C210M1”. The suffix -VCzz is used only to distinguish different hardware configurations of the same server model/generation.
- “UCS-” is to distinguish these SKUs from Cisco MCS 7800 SKUs.
- xxxx is the server model as described at <http://www.cisco.com/go/ucs>: at this time “B200”, “C210” and “C200” are the only supported server models.
- yy is the server generation as described at <http://www.cisco.com/go/ucs>: at this time “M1” or “M2” are the only supported server generations. Note that C200 M1 is not supported, only C200 M2.
- -VCzz is a suffix indicating a unique hardware configuration. Unlike Cisco MCS 7800, all Collaboration SKUs for UCS ship as bare-metal, and a given SKU is applicable to any UC product that supports that server model. Here are the suffixes used:

-VCS1: “Virtualized Collaboration”, “SAN storage”, 1st configuration

-VCD1: “Virtualized Collaboration”, “Disks (or DAS) storage”, 1st configuration

-VCD2: “Virtualized Collaboration”, “Disks (or DAS) storage”, 2nd configuration

The following information affects server purchasing decisions for Cisco Unified Communications products so is included here for background/reference/convenience.

Positioning - when should you buy Cisco UCS vs. Cisco MCS 7800 for Cisco Unified Communications?

Table 28 outlines the main differences between **Cisco Unified Communications** on the Cisco MCS 7800 vs. **Cisco Unified Communications** on Cisco UCS. If your customer lacks skills in administering and supporting servers, VMware, and storage technology, **do not sell them Cisco UCS** unless it is a Managed/Hosted Services opportunity and someone with those skills will be performing implementation and operation. **Customers lacking these skills must be sold the Cisco MCS 7800.**

Table 27. Cisco Unified Communications on Cisco MCS 7800 vs. Cisco Unified Communications on Cisco UCS

UC on MCS 7845	UC on UCS B-series	UC on UCS C-series
Physical, bare-metal, non-virtualized installation	VMware-only installation	
Cisco on OEM server	Cisco on Cisco-manufactured server	
Support for all UC apps	Phased support of UC apps (see www.cisco.com/go/uc-virtualized for list)	
Single standalone application supported	Application Co-residency supported	Application Co-residency on select configurations.
Short life from FCS to EoS	Use of VMware can extend effective life	
Many SKUs per server configuration	Single SKU per server configuration	
“Narrow” Application/Server compatibility	“Broad” Application/Server compatibility	
DAS (local disks) storage only for UC apps	Fiber Channel SAN for UC apps	DAS (local disks) storage, plus Fibre Channel SAN on select configuration.
List Price \$24K per server	List Price \$13,400 per blade server, plus additional price of VMware licensing, chassis, fabric extenders, fabric interconnect switches, etc.	List Price \$16,500 - \$23,600 per rack-mount server, plus additional price of VMware licensing.
Appliance user experience	“Not an appliance”	
Factory-installed OS and Application	Nothing factory-installed	
No Server/OS expertise required.	Expertise with Servers, VMware and SAN required	Expertise with Servers and some expertise with VMware required.
“One stop shop” management via Application	“Three screens” to manage: Application, VMware, Server	

Can Cisco UCS be sold for third-party applications and operating systems? Yes, but these should only be sold via Data-Center SKUs. Collaboration UCS SKUs are only for use with UC applications.

Capacity limits for Cisco UCS should come from the design guides and calculator tools at <http://www.cisco.com/go/srnd>. Because of the application co-residency via VMware, effective capacity per server will be much higher than that for the Cisco MCS 7845. See also the sizing guidelines at www.cisco.com/go/uc-virtualized

Third-party hardware components on Cisco UCS are not supported with UC applications unless explicitly indicated in the software ordering guides or release notes.

Reuse of a Cisco UCS to run a different software product is usually supported provided the target application supports the UCS model, and the UCS server has the correct specs. Consult the appropriate server compatibility matrix for your applications.

Service Processors: Cisco UCS B-Series uses UCS Manager software, which is embedded in the Cisco UCS 6100 Fabric Interconnect Switches. Cisco UCS C-Series currently uses Cisco Integrated Management Controller (CIMC) for out-of-band management access. Both solutions also leverage VMware vCenter for certain kinds of alerts.

Keyboards, mice, and monitors are not included with Cisco UCS. Cisco does not make or resell any Keyboard-Video-Mouse (KVM) remote-access hardware or software.

Important Notes on Cisco UCS Lifespan

Because lifecycle status is often a purchasing consideration, we include some reference information here.

- Hardware and Software releases have separate life spans, separate End-of-Life policies, and separate End-of-Sale/End-of-Support announcements. Carefully read an announcement because it will be for either hardware or software, not both. See the End-of-Life portal at:
http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_eol_notices_list.html.
- Cisco UCS servers have a life span in line with other industry server vendors. Two-year life from FCS to end of sale is targeted, but effective life for UC may be less because of certification lag. Supplier events may also force earlier end of sale. The use of VMware-only installation is expected to reduce the effect of server turnover on application version compatibility.
- Cisco UCS hardware and Cisco Unified Communications Manager software have completely different lifecycles and end-of-life/end-of-support policies and milestone dates. End of Sale of Cisco UCS hardware does **not** mean end of sale of any software release, and vice versa. Separate End-of-Sale notices are sent for hardware vs. software releases.
- Hardware End of Sale is not the same thing as hardware End of Support. Cisco UCS hardware End of Support is 5 years after Cisco UCS hardware End of Sale per standard Cisco policy. See the next section for details on how Cisco Customer Advocacy Service Logistics handles repair/replacement of Cisco UCS 7800 servers purchased from Cisco.

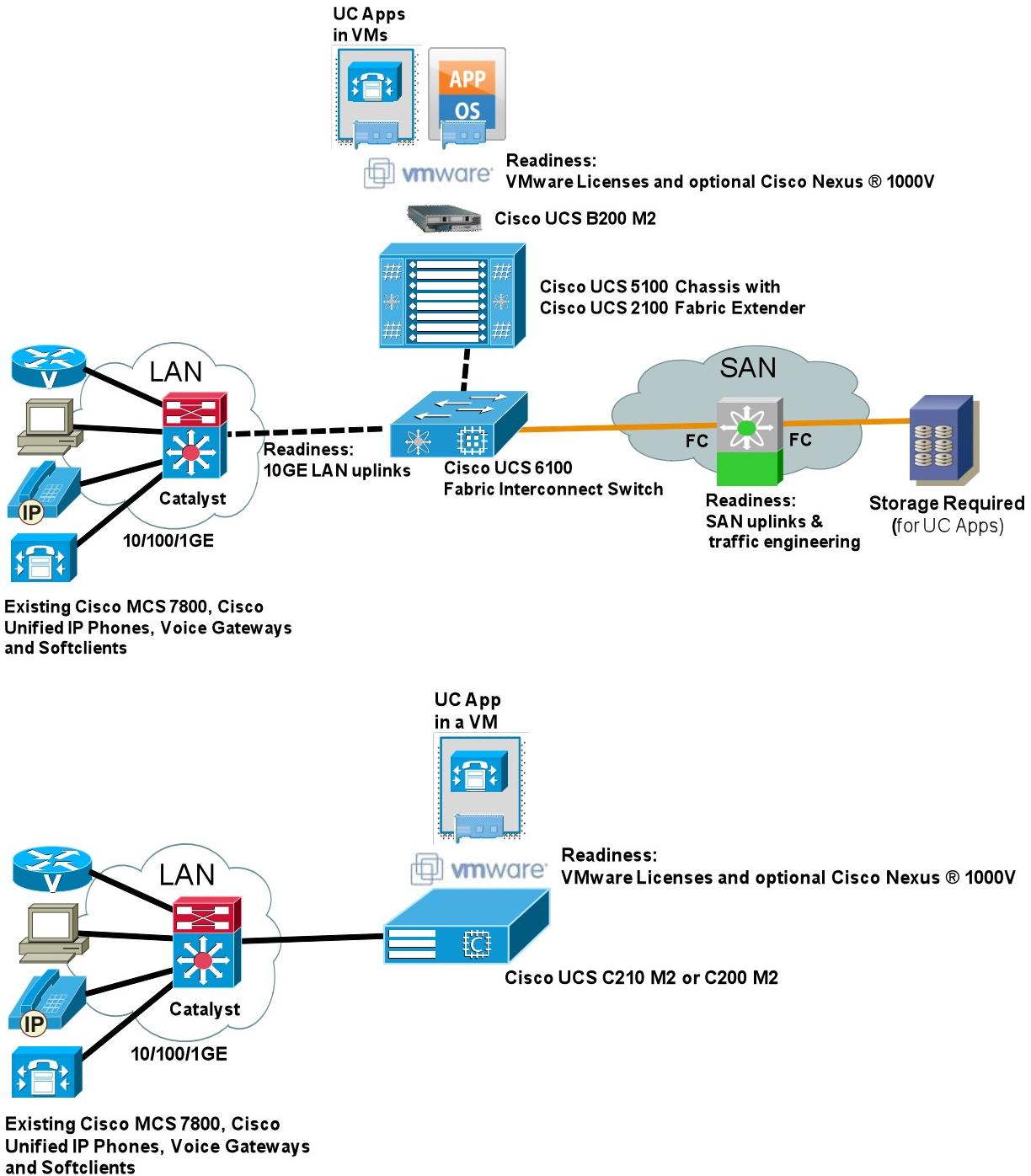
Important Notes on Cisco UCS Service and Support

- UC on UCS hardware may be serviced at the blade level or component level. Blade server replacements are attempted only after component replacement efforts have failed.
- Service contracts must be purchased for the UCS hardware, VMware software, UC software, and storage environment to cover the entire solution.
- Cisco UCS warranty is 3 years vs. 1 year on the Cisco MCS 7800 via Cisco SMARTnet® support. As with other Cisco UCS hardware, Warranty Plus services are also offered. For more information on Warranty Plus, see the following http://www.cisco.com/en/US/products/ps10321/serv_home.html.
- Repair/replacement of components or full-box RMAs are available only for Cisco UCS models/generations that are before their hardware End-of-Support (or Last-Date-of-Support) date (this date is per standard Cisco policy 5 years after hardware End of Sale). Even if a customer's maintenance and support contract extends past this date, Cisco will still not support the hardware past its Last Date of Support. For example, if the Cisco UCS model/generation Last Date of Support is in March, your Cisco support contract end date is December. Cisco will not repair/replace that UCS if the problem occurs in April or later. Note that Unified Communications Software Subscription, Cisco User Connect Licensing, and Cisco Unified Workspace Licensing are all software items and do not affect this hardware support policy.
- Prior to Cisco UCS Last Date of Support, if Cisco Customer Advocacy Service Logistics finds its depot inventory getting low, a "same or better" policy is applied for Cisco UCS problems found to require a hardware RMA. This scenario assumes that the customer has correct contract coverage as detailed above, and that the hardware is before its Last Date of Support. In the rare case that an identical replacement is not available, Cisco Product Management will advise Customer Advocacy Service Logistics on the migration device to use.

4.2 New Systems

UC on UCS solutions require specification of several elements depicted in Figure 2.

Figure 2. “What Do I Need to Quote?”



You should familiarize yourself with the following resources to help you quote a UC on UCS solution:

- Technical Prep materials at <http://www.cisco.com/go/ucmigration>.
- Plan/Design and support information at <http://www.cisco.com/go/uc-virtualized> and <http://www.cisco.com/go/ucsrnd>. Some level of UC application design effort is required to determine server quantity required.

- **Netformx DesignXpert**, which is used to order Cisco UCS B-Series blade servers, Cisco UCS 5100 Blade Server Chassis, Cisco UCS 2100 Series Fabric Extenders, and Cisco UCS 6100 Fabric Interconnect Switches. Cisco has created both a “UC Advisor” and “UCS Advisor” within DesignXpert to assist with solution pricing. Please visit www.cisco.com/go/designxpert.
- **Solution Expert**, which will determine Cisco UCS server quantity for input into Netformx “UCS Advisor”.

In general, the ordering tool workflow will be something like this:

1. Go to Solution Expert or Netformx DesignXpert “UC Advisor” to configure the Collaboration software and any desired Collaboration SKUs for VMware software and/or UCS servers.
2. With the output of above, use Netformx DesignXpert “UCS Advisor” to order any remaining/required Data Center SKUs for VMware software and/or UCS servers. E.g. for UCS B-series, this will allow you to order required UCS 2100/5100/6100 hardware SKUs.
3. The resulting order will have separate line items for Collaboration software, Collaboration VMware SKU, Collaboration UCS server SKU, and Data Center SKUs for VMware and UCS servers.
 - a. Collaboration SKUs (for applications, VMware, UCS B-series and UCS C-series) can be entered straight into Dynamic Configuration Tool or other Cisco ordering tools.
 - b. Data Center SKUs for UCS C-series including VMware options can be entered straight into Dynamic Configuration Tool or other Cisco ordering tools.
 - c. For Data Center SKUs for UC on UCS B-series:
 - i. You can NOT create them via Dynamic Configuration Tool or other Cisco ordering tools.
 - ii. You must first generate a ConfigSet ID and Access Key via Netformx DesignXpert.
 - iii. You must also generate a Deal ID via Commerce Workspace or Deals Desk.
 - iv. You must then load the ConfigSet ID, Access Key and Deal ID into Cisco Ordering Tool.
 - v. Cisco employees can consult Sales Acceleration Center for assistance on this step.
 - vi. Channel partners can consult their Cisco channel account team for assistance.

Follow this checklist to quote a UC on UCS solution. You will need assistance from your Data-Center account team for many of these elements.

1. Gather information required to quote.
2. Determine UC Virtual Machine quantity, and UCS server quantity
3. Quote UCS servers and any other required UCS components
4. Quote “Readiness” requirements (VMware, network, storage)
5. Quote UC, UCSS, and Services

Each step will be further detailed below.

1. Gather information required to quote

UC on UCS quotes are easiest if you have already done a design based on a Cisco MCS 7800 quote and you are converting it to UC on UCS. The following information is required to successfully quote a solution:

- Which applications will be included in the proposal?

- Check server compatibility resources to ensure the target applications (and versions) are supported for the UCS models you want to quote. For example, Cisco UCM compatibility starts with Version 8.0(2), requires use of VMware ESXi 4.0, and is detailed at <http://www.cisco.com/go/swonly> and http://www.cisco.com/en/US/prod/collateral/voicesw/ps6790/ps5748/ps378/prod_brochure0900aecd8062a4f9.html.
- **UC Applications:** See <http://www.cisco.com/go/uc-virtualized> for a list of applications and versions that support Cisco UCS, and links to product-specific support information.
- **Other Cisco Applications:** For example, Network Management, Security, Wireless, etc. This software may run on a different blade in the same chassis as UC, but may not be co-resident on the same server with UC.
- **Third-party Applications:** For example, OEM software, Solutions Plus, Cisco Technology Developer Program, or customer-provided applications such as Directory, File/Print, Customer Relationship Management, Human Resources Information System, Enterprise Resource Planning, etc. Check with the vendor's server support policy for whether the applications can run on Cisco UCS. This software may run on a different blade in the same chassis as UC, but may not be co-resident on the same server with UC.
- Sites that will host the applications, and which servers/applications will live at each site. Most customers either have everything at a single site or split across a primary and redundant site.
- Total number of software application instances, and what application and “role”.
 - E.g., instance count for a Cisco MCS 7800 solution is equal to the number of MCS servers.
 - E.g., Application and “role” could be Cisco UCM Publisher, Cisco UCM Subscriber, Cisco Unified CCE Router, Cisco Unified Intelligence Suite Archiver, Nuance server, etc.
- For B-series deployments, identify customer’s “Placement Logic” and business criteria for the design.
 - Will all servers and software live at a single site or at multiple sites? How are they split?
 - Does the customer want to minimize server footprint and maximize server usage, or instead spread apps across multiple servers, chassis, and sites?
 - Identify “anticonsolidation” business requirements such as high-availability concerns, service-level agreements, change management effect, IT organization, assessed criticality of the apps, and security domains. Any of these parameters can limit or prevent server consolidation and application co-residency, even if Cisco supports it from a technical perspective.

2. Determine Virtual Machine Quantity and Cisco UCS Server Quantity

Wherever you would have deployed one Cisco MCS 7800, you will now deploy one Virtual Machine. For UCS C-series, one Virtual Machine per server is supported, so the required UCS server count is the same as the MCS server count. For UCS B-series, multiple Virtual Machines per server are supported, so the required UCS server count, while design-dependent, will usually be 50-75% less than if you did the design on the Cisco MCS 7800. To determine the minimum UCS server quantity, do one of the following:

- Determine your Virtual Machine (VM) quantity based on how many Cisco MCS 7800 you would have deployed. Translate the Virtual Machine quantity into a UCS server quantity using the supported server specs at <http://www.cisco.com/go/swonly> (to get physical CPU cores per server) vs. the supported VM templates and supported co-residency combinations at <http://www.cisco.com/go/uc-virtualized> (to determine cores per VM and VMs per server), following design rules at <http://www.cisco.com/go/srnd>.
- Use Solution Expert, which will output required UCS server quantity and configuration.
- For UCS B-series, use “UC Advisor” in Netformx DesignXpert. This uses the identical questionnaire and rules as Solution Expert, and outputs the same UCS server quantity and configuration. Note: if you do not use

If you use Netformx DesignXpert, you will bypass configuration checking rules and you may submit an incorrect configuration. This will delay booking and shipping of your order.

For UCS B-series, the minimum server quantity may need to be increased to accommodate the customer's "Placement Logic". For example, any of the following will force you to increase the UCS server quantity required.

- Use of redundant servers, chassis, and sites
- Application node redundancy by spreading them out among multiple servers, chassis, and sites
- Buying extra servers for use as "hot-standby spares" or "lab servers"
- Segregating mission-critical applications from those less critical
- Segregating UC, non-UC, and third-party applications on different servers (because only "UC with UC" co-residency is supported)
- Segregating applications belonging to different IT teams or with different change-management requirements

3. Quote Cisco UCS Servers and Any Other Required UCS Components

See <http://www.cisco.com/go/swonly> for more information on Cisco UCS support.

A Cisco UCS server may be quoted as one of the following Collaboration part numbers on standard Cisco price lists. Each only supports a single fixed server configuration and does not include any other UCS components. It provides simplicity of ordering, such as for deployments that mostly comprise Cisco Unified Communications software. Table 29 gives ordering information for the supported UCS B-series and C-series servers.

Table 28. Ordering Information for Supported Cisco Unified Computing Servers

Product Number	Description	List Price (\$US)
UCS-B200M2-VCS1 (Tested Reference Configuration 1)	Bare Metal UCS B200M2 Blade Server, 2xE5640 CPU, 48GB RAM, 2x146GB HDD	\$17,200
UCS-B200M1-VCS1 (Tested Reference Configuration 1)	Bare Metal UCS B200M1 Blade Server, 2xE5540 CPU, 32GB RAM, 2x146GB HDD	\$13,400
UCS-C210M2-VCD2 (Tested Reference Configuration 1)	Bare Metal UCS C210M2 Svr.,2xE5640 CPU,48GB RAM,10x146GB HDD	\$29,100
UCS C210 M2 Tested Reference Configuration 2	This configuration supports Fibre Channel SAN storage, but is not offered as a Collaboration SKU. See www.cisco.com/go/swonly for details on this configuration including list of Data Center SKUs to order.	
UCS-C210M1-VCD1 (Tested Reference Configuration 1)	Bare Metal UCS C210M1 Svr.,2xE5540 CPU,12GB RAM,6x146GB HDD	\$16,500
UCS-C210M1-VCD2 (Tested Reference Configuration 2)	Bare Metal UCS C210M1 Svr.,2xE5540 CPU,36GB RAM,10x146GB HDD	\$23,600
UCS C210 M1 Tested Reference Configuration 3	This configuration supports Fibre Channel SAN storage, but is not offered as a Collaboration SKU. See www.cisco.com/go/swonly for details on this configuration including list of Data Center SKUs to order.	
UCS-C200M2-VCD2 (Tested Reference Configuration 1)	Bare Metal UCS C200M2 Svr.,2xE5506 CPU,24GB RAM,4x1TB HDD	\$14,700

A Cisco UCS server may also be quoted as a “build-to-order” configuration of Data-Center part numbers. For UCS C-series, these may be ordered via standard Cisco ordering tools. For UCS B-series, these must be ordered via “UCS Advisor” in NetformX DesignXpert. This option is appropriate for mixed software deployments, where the customer wants something different than the “preset” reference configuration. See <http://www.cisco.com/go/swonly> for the alternative server configurations that are supported. Note that Netformx DesignXpert will encourage memory configurations that align with maximum performance, and sometimes these recommendations will differ from the reference configuration used in the Collaboration SKU. As long as you follow the minimum memory rules at <http://www.cisco.com/go/swonly> you will be supported.

Cisco UCS B-Series Blade Server solutions also require several other components - Cisco UCS 5100 Blade Server Chassis, Cisco UCS 2100 Fabric Extenders, and Cisco UCS 6100 Fabric Interconnect Switches. These components are available only as Cisco Data Center part numbers. You must use the NetformX DesignXpert ordering tool “UCS Advisor” to properly configure and quote these components. For example configurations, see <http://www.cisco.com/go/swonly>.

- At least 1 Cisco UCS 5100 Blade Server Chassis is required for every 8 blades. Additional chassis are needed if you want redundant chassis and/or split servers across multiple sites.
- Each chassis will require one or two Cisco UCS 2100 Fabric Extenders, determined by redundancy concerns and expected LAN/SAN traffic load.
- Each site requires one or two Cisco UCS 6100 Fabric Interconnect Switches, determined by redundancy concerns and connected chassis. A single Cisco UCS 6100 can connect more than 10 chassis (80 physical servers, up to 320 Cisco Unified Communications Manager Virtual Machines), so two per site is usually plenty. Port Licenses may be required to connect all chassis, and interface modules are required for interconnect to customer’s LAN and SAN networks.

4. Quote “Readiness” Requirements

UC on UCS solutions require particular VMware software, network, and storage configurations to be supported.

VMware Readiness

Each Cisco UCS blade or rack-mount server requires an installation of VMware vSphere 4 (ESXi 4.0 or 4.1). Each populated CPU socket of each Cisco UCS server must be licensed. Cisco Unified Communications does not support “bare-metal”, “physical”, or “nonvirtualized” installation on Cisco UCS.

The VMware software can optionally be ordered as a single “per-server” Collaboration part number on standard price lists. Note that a “per-server” Collaboration SKU exists only for “Standard Edition”, dual-CPU server and one-year support subscription from VMware required. Table 29 gives ordering information for the VMware vSphere ESXi 4.0 Standard Edition.

Table 29. Ordering Information for VMware vSphere ESXi 4.0 or 4.1 Standard Edition

Product Number	Description	List Price (\$US)
VMW-UC-STD-K9-1A	VMware vSphere ESXi 4.0 Standard Edition (2 CPU), 1 yr support required	

Alternatively, VMware may be ordered as an option on a server Data Center SKU or as a VMware “spare” Data Center SKU using Cisco ordering tools (for UCS C-series) or Netformx DesignXpert “UCS Advisor” (for UCS B-series). In this case a “per-CPU” Data Center part number must be ordered for each populated CPU socket on the Cisco UCS server.

You may order a Collaboration UCS SKU with a Data Center VMware SKU, or vice versa. Note that Data Center SKUs are only available for VMware Advanced, Enterprise and Enterprise Plus Editions. Collaboration SKUs are only available for VMware Standard Edition. VMware may only be sold by Cisco for use with UCS servers.

Regardless of how the server was ordered, customers can also purchase the license from VMware or reuse an existing license.

IMPORTANT: In all cases, you MUST also sell VMware service when you sell VMware product as a Cisco part number. See Services section below.

Note that there is no Unified Communications Software Subscription coverage for VMware software. VMware provides its own subscription service that covers upgrades, updates, and technical support.

For system administration, customers will also need at least one licensed copy of the VMware vCenter management client. These clients are available only from VMware, or from Cisco as a Data Center SKU. There is no Collaboration SKU for this product.

See <http://www.cisco.com/go/swonly> for all other details. Below is an example of a clean order for 1 unit of the Collaboration “per-server” SKU for VMware including required services SKU (screenshot from Multi-Line Configurator):

2	VMW-UC-STD-K9-1A VMware ESXi 4.0 Standard (2 CPU), 1 yr support required Crypto	1	2980.00
2.1	VMW-VS-STD-1A VMware vSphere Standard (1 CPU), 1 yr support required Crypto	2	0.00
4	CON-ISV1-JCSTD1A ISV 24X7 VMware vSphereESXi 4.0 Std,2 CPU,1yr sup	1	596.00

Network Readiness (LAN and SAN)

- Cisco UCS requires hookup to the customer’s LAN and SAN. The customer should already have these networks (hopefully comprising Cisco Catalyst® Switches, Cisco MDS modules, and Cisco Nexus Switches), but uplinks, expansions, or charge backs may be required to enable UC on UCS. See <http://www.cisco.com/go/srnd> for more details.
- UCS C-series uses standard 10 Megabit / 100 Megabit / 1 Gigabit Ethernet interconnects.
- UCS C210M1 Reference Configuration 3 uses a Fibre Channel Host Bus Adapter to connect to the SAN.
- For UCS B-series, the network interconnect is via the Cisco UCS 6100 Fabric Interconnect Switch, which supports only 10 Gigabit Ethernet and Fibre Channel links.
- There are no Collaboration SKUs provided for these network components.

Storage Readiness (only for UCS B-series and UCS C210M1 Reference Configuration 3)

- Cisco Unified Communications 8.x on either a Cisco UCS B200 M1/M2 Blade Server or on Cisco UCS C210 M1/M2 Reference Configuration 3 requires local disks on the server (to run VMware software), as well as a Fibre Channel Storage-Area Network (SAN) attached disk array (to run UC apps).
- Cisco does not sell the disk array - this is from a third party such as Cisco’s partners EMC and NetApp. Estimated costs of these solutions are around ~\$10-15 per Gigabyte (mostly CapEx). The customer will usually already have this storage, but the “allocation” for UC on UCS may require an expansion or chargeback.

- The capacity required on the disk array is design-dependent - see <http://www.cisco.com/go/uc-virtualized> and <http://www.cisco.com/go/srnd> - but must cover such things as Virtual Machine logical disks, VMware overhead, and physical-disk redundancy.
- See <http://www.cisco.com/go/swonly> for other technical requirements. Outside of these requirements, storage configuration is not specified - it only has to be supported by VMware and Cisco UCS, and meet the application capacity and performance requirements at <http://www.cisco.com/go/uc-virtualized>.

5. Quote UC, UCSS, and Services

Cisco Unified Communications

Pricing for UC applications, phones, soft clients, and gateways is exactly the same for Cisco Unified Communications on the Cisco MCS 7800 and Cisco UCS. Note that because 8.0(2) is the minimum version supported, you must use either Cisco Unified Workspace Licensing (UWL) or User Connect Licensing (UCL) to quote UC apps on this hardware.

Unified Communications Software Subscription

UCSS pricing and coverage is identical for Cisco Unified Communications on the Cisco MCS 7800 and Cisco Unified Communications on the Cisco UCS. Note that Unified Communications Software Subscription does not cover VMware software, even if it is purchased from Cisco.

Services

UC services for applications, phones, gateways, and soft clients (ESW or Cisco SMARTnet support) are exactly the same for Cisco Unified Communications on the Cisco MCS 7800 and Cisco Unified Communications on Cisco UCS.

Cisco UCS server hardware requires its own special services. **Important: Cisco UCS does not use Cisco SMARTnet support;** instead it uses an extended 3-year warranty with optional value-add services (see http://www.cisco.com/en/US/products/ps10321/serv_home.html for more details). Table 30 lists the service options available for UC on UCS hardware. For UCS B200M1, these same service options are used regardless of if the Cisco UCS server is purchased as a Collaboration SKU or a Data Center SKU. For UCS C210M1, the service options in Table 30 only apply to Collaboration SKUs – you must use different service options if purchased as Data Center SKU. For UCS B-series, other service options may be available via the Netformx DesignXpert “UCS Advisor”. The information below is for convenience only; the authoritative sources are the Services Ordering Guide and your Services Account Manager.

Table 30. Ordering Information for Services Options

Product Number	Description	List Price (\$US)
UCS-B200M2-VCS1		
Service SKUs coming soon		
UCS-B200M1-VCS1		
CON-UCS8-B66201	UCS 24x7x2OS	
CON-UCS7-B66201	UCS 24x7x4OS	
CON-UCS6-B66201	UCS 8x5x4OS	
CON-UCS5-B66201	UCS 8x5xNDBOS	
CON-UCS4-B66201	UCS 24x7x2	
CON-UCS3-B66201	UCS 24x7x4	
CON-UCS2-B66201	UCS 8x5x4	
CON-UCS1-B66201	UCS8x5xNBD	
CON-UCW8-B66201	UCW 24x7x2OS	
CON-UCW7-B66201	UCW 24x7x4OS	
CON-UCW6-B66201	UCW 8x5x4OS	
CON-UCW5-B66201	UCW 8x5xNDBOS	
CON-UCW4-B66201	UCW 24x7x2	
CON-UCW3-B66201	UCW 24x7x4	
CON-UCW2-B66201	UCW 8x5x4	
UCS-C210M2-VCD2		
Service SKUs coming soon		
UCS-C210M1-VCD1		
CON-UCS8-UCSC21M1	UCS 24x7x2OS	
CON-UCS7-UCSC21M1	UCS 24x7x4OS	
CON-UCS6-UCSC21M1	UCS 8x5x4OS	
CON-UCS5-UCSC21M1	UCS 8x5xNDBOS	
CON-UCS4-UCSC21M1	UCS 24x7x2	
CON-UCS3-UCSC21M1	UCS 24x7x4	

CON-UCS2-UCSC21M1	UCS 8x5x4	
CON-UCS1-UCSC21M1	UCS8x5xNBD	
CON-UCW8-UCSC21M1	UCW 24x7x2OS	
CON-UCW7-UCSC21M1	UCW 24x7x4OS	
CON-UCW6-UCSC21M1	UCW 8x5x4OS	
CON-UCW5-UCSC21M1	UCW 8x5xNDBOS	
CON-UCW4-UCSC21M1	UCW 24x7x2	
CON-UCW3-UCSC21M1	UCW 24x7x4	
CON-UCW2-UCSC21M1	UCW 8x5x4	
UCS-C210M1-VCD2		
CON-UCS8-UCSC210M	UCS 24x7x2OS	
CON-UCS7-UCSC210M	UCS 24x7x4OS	
CON-UCS6-UCSC210M	UCS 8x5x4OS	
CON-UCS5-UCSC210M	UCS 8x5xNDBOS	
CON-UCS4-UCSC210M	UCS 24x7x2	
CON-UCS3-UCSC210M	UCS 24x7x4	
CON-UCS2-UCSC210M	UCS 8x5x4	
CON-UCS1-UCSC210M	UCS8x5xNBD	
CON-UCW8-UCSC210M	UCW 24x7x2OS	
CON-UCW7-UCSC210M	UCW 24x7x4OS	
CON-UCW6-UCSC210M	UCW 8x5x4OS	
CON-UCW5-UCSC210M	UCW 8x5xNDBOS	
CON-UCW4-UCSC210M	UCW 24x7x2	
CON-UCW3-UCSC210M	UCW 24x7x4	
CON-UCW2-UCSC210M	UCW 8x5x4	
UCS-C200M2-VCD2		
Service SKUs coming soon		

VMware software also requires services contracts to cover Cisco Technical Assistance Center (TAC) support from Cisco, technical assistance support from VMware, and triage technical assistance support between Cisco and VMware.

- If VMware is purchased as a Cisco Collaboration SKU, use the services SKU listed in Table 31. This SKU is mandatory and one unit MUST be sold with every unit of Collaboration VMware SKU.

Table 31. Ordering Information for VMware

Product Number	Description	List Price (\$US)
CON-ISV1-UCSTD1A		

- If VMware is purchased as a Cisco Data Center SKU for UCS B-series, see Netformx DesignXpert for correct services pricing (see standard ordering tools for VMware services for UCS C-series). Services are mandatory and MUST be sold with every Collaboration VMware SKU
- If VMware is purchased from a third party, then the customer is required to have a support contract direct with VMware or other appropriate third party

Cisco VMware resale takes advantage of VMware's "subscription", which includes product upgrades, updates, and technical support for a fixed period (unlike Cisco where upgrades are covered by UCSS and updates and technical

support are covered by SmartNet and ESW). Note: This information is here for convenience only; the authoritative sources are the Services Ordering Guide and your Services Account Manager.

Important: Any of the following will delay booking/shipping of your order, cause problems getting TAC support for your customer and cause Cisco to not be in contract compliance:

- Not selling, forgetting or otherwise omitting Cisco VMware service SKUs from an order that contains Cisco SKUs for VMware product.
- Including the wrong VMware service on an order. For example, the Cisco Collaboration VMware Product SKU requires a specific Cisco Collaboration VMware Service SKU.
- Mismatching the quantity of VMware product SKU with quantity of VMware service SKU. E.g., a clean order with 6 units of VMware product MUST include 6 units of VMware services.
- Entering an incorrect service duration. E.g., the Cisco Collaboration VMware Product SKU only has a service option for one year. If you buy the Cisco Data Center VMware Product SKU, you have one-year and three-year service options.

Below is an example of a clean order for 1 unit of the Collaboration “per-server” SKU for VMware including required services SKU (screenshot from Multi-Line Configurator):

<input checked="" type="checkbox"/> 2	VMM-UC-STD-K9-1A VMware ESXi 4.0 Standard (2 CPU), 1 yr support required Crypto	1	2980.00
2.1	VMM-VS-STD-1A VMware vSphere Standard (1 CPU), 1 yr support required Crypto	2	0.00
4	CON-ISV1-UCSTD1A ISV 24x7 VMware vSphere ESXi 4.0 Std, 2 CPU, 1yr sup	1	596.00

4.3 Component Changes on Existing Hardware

Note: For UCS C210M1, Tested Reference Configuration 1 cannot be field-migrated to Tested Reference Configuration 2. Customers who desire co-residency must order Tested Reference Configuration 2 or 3.

Note: there is no hardware migration from M1 servers to M2 servers.

There are no Collaboration SKUs defined for Cisco UCS component spares (e.g., memory modules, hard disk drives, fans, power supplies, etc.). Please use Data-Center SKUs for any component spares needed.

USB Hardware:

UC applications require VMware to be supported on UCS hardware. At this time Cisco Unified Communications does not support USB-based devices when installed on VMware, mean that the following hardware components should **not** be purchased for Cisco Unified Communications Manager when it will be deployed on VMware and Cisco UCS:

- External tape drives
- Dongle for Music On Hold via external music source

Note that the Hardware Security Key for Cisco Unified Communications Manager may be ordered, because this key does not plug into the USB port of the server; rather it is plugged into a system administrator's laptop or desktop computer.

See Cisco Unified Communications product documentation for other features impacted by lack of USB device support (such as tape backup support).

Rack-mounting or Rail Kits:

For details on what ships with Cisco UCS, see the links below.

- **Cisco UCS B-Series:** See:
http://www.cisco.com/en/US/docs/unified_computing/ucs/hw/chassis/install/install.html
- **Cisco UCS C-Series:** See:
http://www.cisco.com/en/US/docs/unified_computing/ucs/c/hw/C210M1/install/install.html#wp1312680

If you require rail kits for a different rack type (such as telco racks or server vendor proprietary racks), order directly from a third party such as Rack Solutions (<http://www.racksolutions.com>). Cisco does not provide SKUs for other rail kits.

Power Cords:

Note: At this time Cisco UCS does not offer a Direct Current (DC) power supply offer, only Alternating Current (AC) power supplies.

Power cord options are included with Cisco UCS C210 and UCS C200 General-Purpose Rack-Mount Servers. Power cords do not ship with Cisco UCS B200 Blade Servers, only with Cisco UCS 5100 Blade Server Chassis and Cisco UCS 6100 Fabric Interconnect Switches. Cisco UCS provides options for different power-cord types (such as hooded power cords, or male/female connector variants for hookup to a UPS). If you want to use a power cord type that is not currently sold by Cisco, consult your account team so they can consult UCS product management.

5. Cisco MCS 7800 Media Convergence Servers

5.1 General Information

For Cisco MCS 7800 hardware End of Sale and End of Life, please see

http://www.cisco.com/en/US/products/hw/voiceapp/ps378/prod_eol_notices_list.html.

For Cisco Unified Communications Manager appliances that are End of Sale and End of Life because the hardware they use is End of Sale, please see

http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_eol_notices_list.html.

Note that hardware and software End of Sale have different dates and different timeframes, but End of Sale of either hardware or software will trigger End of Sale of an appliance.

Latest and greatest shipping models/generations as of November 2010 are as follows:

- Cisco MCS 7816-I5, available as bare-metal or Cisco Unified Communications Manager appliance
- Cisco MCS 7825-I5, available as bare-metal or a Cisco Intercompany Media Engine appliance or Cisco Unified Communications Manager appliance; Software-only equivalent based on IBM x3250-M3
- Software-only equivalent of Cisco MCS 7825-H4 based on HP DL320G5p
- Cisco MCS 7828-I5, available as a bare-metal spare or a Cisco Unified Communications Manager Business Edition appliance or as part of a Cisco UWL bundle
- Cisco MCS 7835-I2 V02, available as bare-metal or Cisco Unified Communications Manager appliance; Software-only equivalent based on single-CPU IBM x3650 no longer available from IBM
- Cisco MCS 7835-I3, available as bare-metal or Cisco Unified Communications Manager appliance, or a Software-only equivalent based on a single quad-core E5504 CPU IBM x3650-M2
- Cisco MCS 7845-I3, available as bare-metal or Cisco Unified Communications Manager appliance, or a Cisco Unified Communication Manager Session Management Edition or a Cisco Intercompany Media Engine appliance; Software-only equivalent based on a single quad-core E5540 CPU IBM x3650-M2
- Software only for single quad-core E5504 CPU and single quad-core E5540 variants of HP DL380G6

Please see the data sheets at

http://www.cisco.com/en/US/products/hw/voiceapp/ps378/products_data_sheets_list.html for specifications of each model.

For reference, here is a “decoder ring” for Cisco MCS 7800 product IDs.

Part Number syntax is usually MCS-78xx-yy-zzzz or MCS78xxyy-K9-zzzz.

- For IPCBU servers, it is sufficient to use only MCS-78xx-yy to completely describe a server model/generation. When distinguishing IPCBU vs. UCBU/CCBU/ETG servers, you should use the entire product ID.
- xx is the Server Class: 7815, 7816, 7825, 7828, 7835, or 7845.
- yy is the OEM Vendor and Model Generation: e.g., -H1 for HP 1st generation, -I2 for IBM 2nd generation, etc.
- zzzz is a suffix indicating one or more of the following: Unique hardware configuration, bare-metal vs. a factory-preloaded version of software, or which product the server belongs to. Here are some example suffixes used:
 - -IPC1, -IPC2: IPCBU “bare-metal” configurations
 - -CMA1: factory install of Cisco Unified Communications Manager 5.0
 - -CMA2, -CMA2D: factory install of Cisco Unified Communications Manager 5.1

- -CMB1: factory install of Cisco Unified Communications Manager 6.0
- -CMB2, -CMB2D: factory install of Cisco Unified Communications Manager 6.1
- -CMC1: factory install of Cisco Unified Communications Manager 7.0
- -CMC2: factory install of Cisco Unified Communications Manager 7.1
- -CCX2, -CCE2, -CCE4: for Contact Center
- -MOB1: for Mobility
- -ECS3, -ECS4, -UC**: for Messaging
- -RC1: for Conferencing
- -SMDx: factory install of Cisco Unified Communications Manager Session Management Edition
- -IMEDx, -IMDx: factory install of Cisco Intercompany Media Engine

The following information affects server purchasing decisions for Cisco Unified Communications products so is included here for background/reference/convenience.

Positioning - why should you buy the Cisco MCS 7800? Cisco and partner field should encourage Cisco MCS 7800 sales because it results in simpler support and more revenue. The primary customer benefits of using the Cisco MCS 7800 with a Cisco maintenance contract are as follows:

- **Factory installation of Cisco Unified Communications Manager 5.0+ software**, which reduces duration of Day 0/Day 1 deployment activity
- **Cisco TAC (and optional Cisco Advanced Services) support of entire hardware/software stack**, including diagnosis, triage, repair dispatch and replacement as needed. Customers who are willing to assume responsibility for hardware support on their own, or who want to use a partner for hardware support, should buy “software-only” Cisco Unified Communications Manager licenses and use certified hardware from <http://www.cisco.com/go/swonly>. Cisco will diagnose to establish if the root cause of a problem is pointing at software or hardware, but hardware root-cause diagnosis and repair/replacement will need to be coordinated by the customer or the customer’s partner. The customer still has to follow all Cisco hardware support policies and rules - the customer just gets to procure hardware and support from a different source.
- **Parts and replacement availability** - Cisco usually does not certify latest and greatest hardware configurations because of time required for firmware/driver certification and building OS images. With the Cisco MCS 7800 it may be easier for the customer to get replacement parts and chassis that are compatible with Cisco software.
- **Essential Operate Service** - For complete details on how support differs for a Software-only purchase vs. Software and Hardware from Cisco, see http://www.cisco.com/en/US/services/ps2961/ps2664/services_data_sheet0900aecd8042826b.pdf.

Positioning - Do not sell a Cisco MCS 7800 for the following scenarios, which are not supported by Cisco:

- Third-party products, including SolutionsPlus and Cisco Technology Developer Program (TDP). The only exception is third-party software bundled with a Cisco product. Even if the third-party software vendor is willing to support MCS, Cisco will not triage or make MCS changes if hardware causes a software problem or incompatibility.
- Third-party operating system: MCS servers are not intended to be sold as general-purpose server platforms (position Cisco Unified Computing System for that need). The only exception is an OS bundled with a Cisco software product. Even if the third-party OS vendor is willing to support MCS, Cisco will not triage or make MCS changes if hardware causes an OS problem or incompatibility.

Capacity limits for the Cisco MCS 7800 should come from the design guides and calculator tools at <http://www.cisco.com/go/srnd>.

Third-party hardware on the Cisco MCS 7800 is not supported unless explicitly covered in the software ordering guides or release notes. For example, Cisco Unified Communications Manager 6.1 does not support different or additional network interface cards, but does support basic UPS integration.

Third-party software support for the Cisco MCS 7800 should come from the software product documentation; e.g., for Cisco Unified Communications Manager, see:

http://www.cisco.com/en/US/prod/collateral/voicesw/ps6788/vcallcon/ps556/prod_bulletin0900aecd806f6221.html or for Cisco Unity and Cisco Unity Bridge backup agent support, see:

http://www.cisco.com/en/US/docs/voice_ip_comm/unity/7x/support/7xcusupp.html.

Reuse of a Cisco MCS 7800 with one SKU suffix to run a different software product may or may not be supported depending on products, versions, and specific MCS models. Consult the hardware support matrix to see what your SKU suffix is equivalent to:

http://www.cisco.com/en/US/prod/collateral/voicesw/ps6790/ps5748/ps378/prod_brochure0900aecd8062a4f9.html.

If your SKU is not listed, contact the support aliases given at the start of this ordering guide to see if/what it is equivalent to.

Keyboards, mice, and monitors are not included with Cisco MCS 7800. The latest models use USB connections. Cisco does not make or resell any Keyboard-Video-Mouse (KVM) remote-access hardware or software.

Important Notes on Cisco MCS 7800 Life Span

Because lifecycle status is often a purchasing consideration, we include some reference information here.

- Hardware and Software releases have separate life spans, separate End-of-Life policies, and separate End-of-Sale/End-of-Support announcements. Carefully read an announcement because it will be for either hardware or software, not both. See the End-of-Life portal at:
http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_eol_notices_list.html.
- Because Cisco MCS 7800 servers are OEM of commodity servers, their life span is much shorter than what is typical of other Cisco hardware products.
- Cisco MCS 7800 FCS tends to lag the HP/IBM server introduction date because of certification and other activity that must occur. Cisco MCS 7800 End of Sale is indexed to HP/IBM Discontinue dates, but Cisco sometimes extends availability past the official date that HP/IBM stops selling the server model/generation.
- HP/IBM life span is typically 12-18 months from product Introduction to the Discontinue date, which for Cisco translates to typically 9-18 months between Cisco MCS FCS and Cisco MCS End-of-Sale dates.
- MCS hardware and Cisco Unified Communications Manager software have completely different lifecycles and end-of-life/end-of-support policies and milestone dates. End of Sale of MCS hardware does **not** mean end of sale of any software release, and vice versa. Separate End-of-Sale notices are sent for hardware vs. software releases, although **either** a hardware End of Sale **or** a software End of Sale will result in End of Sale for an appliance SKU. For example, End of Sale for Cisco MCS 7816-I3 hardware will cause End of Sale for the MCS7816I3-K9-CMB2 SKU. This SKU has both a hardware component and a software component. A hardware End of Sale means this SKU cannot be purchased because the hardware component is no longer available, but the software component, i.e., Cisco Unified Communications Manager 6.1, is **not** affected. A separate Software Release End of Sale governs that.
- Hardware End of Sale is not the same thing as hardware End of Support. MCS hardware End of Support is 5 years after MCS hardware End of Sale per standard Cisco policy. See the next section for details on how Cisco Customer Advocacy Service Logistics handles repair/replacement of Cisco MCS 7800 servers purchased from Cisco.

Important Notes on Cisco MCS 7800 Service and Support

The following applies only to Cisco branded servers and not to exact match equivalents purchased directly from HP/IBM. Contact Cisco Customer Advocacy Service Logistics and Product Support Engineering for additional details.

- Cisco MCS 7800 servers are supported by the OEM vendors (HP/IBM) with Cisco TAC acting as the intermediary. The strategy is to always attempt component replacement first, with whole-box replacement as a last resort at Cisco's discretion. Full server RMAs should therefore be rare and not occur on a regular basis. This policy is not a new one, but some TAC organizations and channel partners are being reeducated.
- For the Cisco MCS 7800, Cisco **strongly** suggests that customers consider purchasing a hardware maintenance and support contract that includes Onsite Support.
- If the OEM Vendor recommends Component replacement for a server, a technician from the OEM Vendor is dispatched only if the Customer has purchased a Cisco Service Contract that includes Onsite coverage on that MCS Server. If a Customer contract does **not** include Onsite coverage, no OEM Vendor technician will be dispatched to assist with the component replacement, and Customers are responsible for replacing the component. This directive includes all replaceable components inside a server, such as a motherboard/system board, which can be extremely difficult and time-consuming to replace.
- Cisco MCS 7800 servers that are under Warranty but are **not** covered with a contract that includes Onsite support will **not** receive Onsite support from the OEM Vendors via Cisco TAC.
- If a Customer does not purchase Onsite contracts but wants to add this coverage later, the customer may do so by contacting Cisco Service Relations to make the arrangements.
- Repair/replacement of components or full-box RMAs are available only for Cisco MCS 7800 models/generations that are before their hardware End-of-Support (or Last-Date-of-Support) date (this date is per standard Cisco policy 5 years after hardware End of Sale). Even if a customer's maintenance and support contract extends past this date, Cisco will still not support the hardware past its Last Date of Support. For example, if the MCS model/generation Last Date of Support is in March, your Cisco SMARTnet contract end date is December. Cisco will not repair/replace that MCS if the problem occurs in April or later. Note that UCSS and Cisco UWL are software items and do not affect this hardware support policy.
- Prior to Cisco MCS 7800 Last Date of Support, if Cisco Customer Advocacy Service Logistics finds its depot inventory getting low, a "same or better" policy is applied for Cisco MCS 7800 problems found to require a hardware RMA. For example, this requirement is usually caused by a generation change such as -H3/I3 replaced with -H4/I4. This scenario assumes that the customer has correct contract coverage as detailed above, and that the hardware is before its Last Date of Support. In the rare case that an identical replacement is not available, Cisco Product Management will advise Customer Advocacy Service Logistics on the migration device to use.

5.2 New Hardware

See the "decoder ring for Cisco MCS 7800 product IDs" in section 5.1 for an explanation of which MCS 7800 SKUs go with which UC applications.

You can use the rest of this checklist if you are ordering MCS 7800 for these UC applications.

- Cisco Unified Communications Manager
- Cisco Unified Communications Manager Session Management Edition
- Cisco Emergency Responder
- Cisco Intercompany Media Engine

For all other UC applications, please consult the ordering guide for that UC application for guidance on what MCS SKU to order. Most applications not listed here require a “bare-metal server SKU” similar to the ones in Step 2 below.

Perform the following steps to order new MCS 7800 hardware:

1. Verify hardware support and appliance availability for the UC application being ordered.
2. Order the appropriate bare-metal server(s) or pre-loaded appliance(s) for the UC application.
3. Order any onsite spares, if desired.
4. Order any hardware add-ons, if desired or needed.

These steps are explained in more detail below.

1. Verify hardware support and appliance availability for the UC application being ordered.

Do not assume that every Cisco MCS 7800 is supported with every version of every product. For example, Cisco Unified Communications Manager no longer supports the Cisco MCS 7815, and Cisco Unified Communications Manager Business Edition is supported only on the Cisco MCS 7828.

Compatibility matrix of hardware models/generations with Cisco Unified Communications Manager releases can be found at

http://www.cisco.com/en/US/prod/collateral/voicesw/ps6790/ps5748/ps378/prod_brochure0900aecd8062a4f9.html

For Cisco Emergency Responder, see its chapter in this Ordering Guide.

For Cisco Intercompany Media Engine and Cisco Unified Communications Manager Session Management Edition, only the models listed in Step 2 below are supported.

Note that all of the above UC applications except Cisco Emergency Responder are available as factory pre-loaded appliances.

Also note that the MCS 7828 may only be purchased in conjunction with Cisco Unified Communications Manager Business Edition. See that ordering guide for details.

If you are ordering “**software-only**” licensing, see <http://www.cisco.com/go/swonly> and the Cisco Unified Communications Manager hardware support matrix for what is approved with Cisco Unified Communications Manager. Note that the Cisco MCS 7816 and MCS 7828 are not supported for software-only licensing. Sometimes there is a gap between when HP and IBM discontinue their servers and when Cisco has certified the next generation, during which time the software-only licenses are not available for new orders because the hardware is not available from HP/IBM. During this interim, for a new purchase either order a MCS from Cisco or wait for the next generation to be certified. If a customer already has the discontinued hardware and just wants to upgrade Cisco Unified Communications Manager, contact your account team to see what options there are. If you are planning to run on HP hardware, please note that the HP DL320G5p and HP DL380G6 are currently the two latest available models that are supported.

Sometimes lifespan is a purchasing criteria. For more details on the Cisco MCS 7800 life span, end of sale, and end of life, see the Technical Prep materials at <http://www.cisco.com/go/ucmigration> as well as Section 5.1 above.

2. Order the appropriate bare-metal server(s) or pre-loaded appliance(s) for the UC application.

If the customer is ordering Cisco Emergency Responder, or otherwise needs a bare-metal server (i.e. hardware with nothing factory pre-loaded), please order from Table 32 below.

Table 32. Bare-metal MCS SKUs

Product Number	Description	List Price (\$US)	UCSS Orderable?
MCS-7816-I5-IPC1	Bare Metal MCS 7816-I5 server 1xX3430 , 4GB RAM and 1x250GB HDD	\$4,000	No
MCS-7825-I5-IPC1	Bare Metal MCS 7825-I5 server 1xX3430 , 4GB RAM and 2x250GB HDD	\$7,000	No
MCS-7835-I3-IPC1	HW Only MCS-7835-I3 with 4GB RAM and Two 146GB SAS HD	\$12,000	No
MCS-7845-I3-IPC1	HW Only MCS-7845-I3 with 6GB RAM and Four 146GB SAS HD	\$24,000	No

If the customer needs a factory pre-loaded appliance (i.e. hardware with the UC application pre-loaded), please order from Table 33 below. Note that there are different appliance SKUs for each UC application and version.

Table 33. Cisco Unified Communications Manager Appliance SKUs (i.e. with factory-pre-loaded software)

Product Number	Description	List Price (\$US)	UCSS Orderable?
Unified CM 8.5			
MCS7816I5-K9-CMD2	Unified CM 8.5 7816-I5 Appliance, 0 Seats	\$4,000	Yes
MCS7825I5-K9-CMD2	Unified CM 8.5 7825-I5 Appliance, 0 Seats	\$7,000	Yes
MCS7835I3-K9-CMD2	Unified CM 8.5 7835-I3 Appliance, 0 Seats	\$12,000	Yes
MCS7845I3-K9-CMD2	Unified CM 8.5 7845-I3 Appliance, 0 Seats	\$24,000	Yes
Unified CM – Session Manager Edition 8.5			
MCS7845I3-K9-SMD2	Unified SME 8.5 7845-I3 Appliance	\$24,000	Yes
Cisco Intercompany Media Engine 8.0(2)			
MCS7825I5-K9-IMD2	Cisco IME 8.0 7825-I5 Appliance	\$7,000	Yes
MCS7845I3-K9-IMD2	Cisco IME 8.0 7845-I3 Appliance	\$24,000	Yes

Configure all of the above with an appropriate power cord selection. Media kits only ship with appliance SKUs. Separate SKUs for software licensing are required to actually activate and run the UC applications.

If the wrong hardware SKU is ordered (e.g. a –CMB2 instead of a –CMC2), contact cs-support@cisco.com to get the order changed. Alternatively, if customer has UCSS, they can get the correct software via Product Upgrade Tool or Voice Software Center on Cisco.com.

3. Order any onsite spares, if desired.

Some customers wish to supplement Cisco SmartNet with an onsite spare MCS 7800. Customers should order a “bare-metal” MCS SKU from Table 32 above for this. Note that attempting to transfer UC software licenses to this spare machine will require a “re-hosting” of license keys. Configure with the appropriate power cord.

3. Order any hardware add-ons, if desired or needed.

If customers want to make any of the following hardware add-ons, see section 5.3 below.

- Add Hardware Security Key for Cisco Unified Communications Manager
- Add External tape drives for backups

- Add Hardware to support Cisco Unified Communications Manager Music On Hold (MoH) feature with an external audio source
- Add Memory, subject to UC application support policy
- Add Hard Drives, subject to UC application support policy
- Use the server vendor's service processor, subject to UC application support policy

5.3 Component Changes on Existing Hardware

In this Scenario, either the hardware is a new purchase or it is existing hardware where the installed software version will not change. If you intend to upgrade your software at the same time as you are making any of these hardware changes, see the Ordering Guide for your software to see if any prerequisite or additional steps are required.

This section covers the following hardware changes:

- a. Hardware Security Key for Cisco Unified Communications Manager
- b. External tape drives for backups
- c. Hardware to support Cisco Unified Communications Manager Music On Hold (MoH) feature with an external audio source
- d. Supported spare, add, or upgrade/replace Memory
- e. Supported spare, add, or upgrade/replace Hard Drives
- f. Replace Rail Kits, or purchase Rail Kits not included with a purchased server
- g. Replace or spare a Fan module
- h. Replace or spare a Power Supply
- i. Power Cords
- j. Service Processors

They are described in more detail below.

Cisco Unified Communications Manager does not support any other hardware changes, such as any form of field changes, adds, swaps, upgrades, or removals of motherboards, CPUs, NICs, etc. See your account team about Battery Backed-up Write Caches (BBWC).

For Uninterruptible Power Supply (UPS) integration, see the Cisco Unified Communications Manager release notes and OS Admin Guide.

In all hardware changes, any customer-provided hardware must be an exact match for what Cisco has certified to be supported, i.e., exactly the same vendor, make, model, specs, and third-party part numbers.

If you purchased a Cisco MCS 7800 from Cisco, do the following:

1. Order one of the SKUs in Table 32 depending on what component you need. Memory and disk quantity and sizes must exactly match the content of <http://www.cisco.com/go/swonly> and the data sheet for the Cisco MCS 7800 model.
2. If the SKUs in Table 32 are not available from Cisco, follow instructions below for "Software-only".

If you purchased your own certified "Software-only" hardware, do the following:

1. Order direct from HP or IBM an exact match of the component(s) you need. Memory and disk quantity and sizes must exactly match the content of <http://www.cisco.com/go/swonly>.
2. If the exact match is no longer available from HP and IBM, the customer should migrate to a newer server.

a. Hardware Security Key for Cisco Unified Communications Manager

Table 34. Cisco Unified Communications Manager Hardware Security Key

Product Number	Description	List Price (\$US)
KEY-CCM-ADMIN-K9=	Hardware Security Key for CUCM Admin, Release 4.0 or Greater (Order a minimum quantity of 2)	\$300

b. External Tape Drives

External tape drives are used only for backups to tape, vs. backups to a network file location.

For older releases of Cisco Unified Communications Manager, Cisco certified and resold an internal SCSI-based 20/40GB Hot Plug Digital Audio Tape (DAT) drive with SKUs DAT-7835-H1= and DAT-7845-H1=. These products are End of Life and no longer sold for new systems. For the installed base upgrading to the latest Cisco Unified Communications Manager versions, certain releases on newest hardware will not support this SCSI tape drive.

Current Cisco Unified Communications Manager releases on currently shipping servers support an external 36/72GB USB Digital Audio Tape (DAT) drive in either a standalone or rack-mounted configuration manufactured by HP. Order this direct from HP using the exact HP part numbers and ordering instructions at www.cisco.com/go/swonly .. Certain Cisco Unified Communications Manager versions on certain hardware models also require a PCI USB adapter for the Cisco MCS 7800 to recognize the USB tape drive. Otherwise this tape drive is universal to all the latest shipping Cisco MCS 7800 models.

Customer tape-drive options are as follows. Note that only the USB tape drive can be purchased new; SCSI tape drive support is included here only for installed-base backward compatibility:

- Cisco MCS 7835-H1 and MCS-7845-H1 and earlier:
 - SCSI tape drive supported on all releases on these models
 - USB tape drive:
 - Cisco Unified Communications Manager 5.0: Supported, but requires PCI-to-USB adaptor
 - Cisco Unified Communications Manager 5.1(3)+: Supported without PCI-to-USB adaptor
- Cisco MCS 7845-H2:
 - SCSI tape drive not supported
 - USB tape drive:
 - Cisco Unified Communications Manager 5.1(3)+: Supported without PCI-to-USB adaptor
- Cisco MCS 7815-I1 and MCS 7815-I2 with Cisco Unified Communications Manager 5.0+:
 - SCSI tape drive not supported
 - USB tape drive not supported
- All other HP & IBM model generations:
 - SCSI tape drive not supported
 - USB tape drive:
 - Cisco Unified Communications Manager 5.0: Not supported
 - Cisco Unified Communications Manager 5.1(3)+: Supported without PCI-to-USB adaptor

c. Hardware for Music on Hold

This section concerns you only if you require an external audio/music source for the Cisco Unified Communications Manager Music On Hold (MOH) feature. Cisco Unified Communications Manager uses an external USB-to-audio dongle for audio connectivity to external sources.

Cisco Unified Communications Manager on the Cisco MCS 7835-1000, MCS 7835-1266, and MCS 7845-1400 used to certify (but not resell) the AOpen AW-840 PCI sound card. This sound card is no longer supported by Cisco.

For Cisco Unified CallManager 3.0 and 4.0 on older servers, Cisco used to certify (but not resell) the Griffin iMic USB Audio Interface with IPT OS 2000.2.7 or higher and the Telex Communications P-800 USB Digital Audio Converter with IPT OS 2000.2.5 or later. Both of these devices are End of Life so are no longer available. Cisco now sells a new USB-to-audio dongle device with the SKU in Table 34.

Existing Cisco Unified CallManager 3.0 and 4.0 customers with Griffin or Telex devices already deployed may upgrade to 4.3 and keep using these devices until they upgrade to 5.0 or later, when they must replace with the SKU given in Table 34.

New purchases of Cisco Unified CallManager 4.3 or later must order the SKU given in Table 34.

The SKU also applies to Software-only customers, who must remember to retain the device if their server is ever returned to or replaced by their hardware provider.

Note that this device uses "S/PDIF 2.5mm plug-in jacks" for physical connection to the audio source.

Table 35. Hardware for Music On Hold

Product Number	Description	List Price (\$US)
MOH-USB-AUDIO=	Music On Hold USB Adapter	\$99

For customers upgrading to Cisco Unified CallManager 4.3 and want to keep their Griffin or Telex devices, Table 35 gives the hardware compatibility:

Table 36. Griffin iMic and Telex Communications P-800 Compatibility with Cisco MCS 7800

Supported with Griffin IMic	Supported with Telex P-800
MCS-7815-I1-IPC1	MCS-7815-I-3.0-IPC1
MCS-7815-I1-IPC3	MCS-7815-I1-IPC1
MCS-7815-I2-IPC1	MCS-7825-H-2.2-EVV1
MCS-7816-H3-IPC1	MCS-7825-H-3.0-IPC1
MCS-7816-I3-IPC1	MCS-7825-I-3.0-IPC1
MCS-7825-H1-IPC1	MCS-7825-H1-IPC1
MCS-7825-H2-IPC1	MCS-7825-I1-IPC1
MCS-7825-H2-IPC2	MCS 7835-1266
MCS-7825-I1-IPC1	MCS-7835-H-2.4-EVV1
MCS-7825-I2-IPC1	MCS-7835-H-3.0-IPC1
MCS-7825-I2-IPC2	MCS-7835-H1-IPC1
MCS-7825-H3-IPC1	MCS-7835-I-2.4-EVV1
MCS-7825-I3-IPC1	MCS-7835-I-3.0-IPC1
MCS-7835-H1-IPC1	MCS-7835-I1-IPC1
MCS-7835-I1-IPC1	MCS-7845-H-2.4-EVV1
MCS-7835-H2-IPC1	MCS-7845-H-3.0-IPC1
MCS-7835-I2-IPC1	MCS-7845-H1-IPC1
MCS-7845-H1-IPC1	MCS-7845-I-IPC1
MCS-7845-I1-IPC1	
MCS-7845-H2-IPC1	
MCS-7845-I2-IPC1	

d. Memory

Installed memory must be an exact match for what Cisco has certified to be supported; i.e., exactly the same vendor, make, model, specs, and third-party part numbers. For guidelines on memory upgrades and replacements, see: http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_tech_note09186a00801fa026.shtml. Different memory configurations (module quantity and size) must not be installed because they are not certified. The Cisco Unified Communications Manager software and kernel are optimized for specific memory configurations, so higher amounts of RAM will not help. In general memory changes are supported only for spares (vs. relying on Cisco SMARTnet coverage and RMA), or to enable upgrading to a new Cisco Unified Communications Manager release. Cisco does not support migrating from one server class to another via CPU, RAM, or disk changes.

Table 38 below only contains SKUs for latest and greatest server generations. If you need memory for an older server generation, please see the ordering guides for Cisco Unified Communications 7.1 and 8.0.

Cisco no longer stocks HP components. . Order these direct from the HP using exact part numbers at www.cisco.com/go/swonly .

Table 37. Cisco MCS 7800 Memory Modules

Product Number	Description	List Price (\$US)
MEM-78xx-I5-2GB=	Spare 2GB DIMM for MCS 7816/25/28-I5	
MEM-7828-I5-1GB=	Spare 1GB DIMM for MCS 7828-I5	
MEM-7835-I3-2GB=	Spare 2GB DIMM for MCS-7835-I3	
MEM-7845-I3-2GB=	Spare 2GB DIMM for MCS-7845-I3	

e. Hard Drives

Installed hard drives must be an exact match for what Cisco has certified to be supported; i.e., exactly the same vendor, make, model, specs, and third-party part numbers. Different hard-drive sizes, vendors, or models must not be installed because they can introduce untested/incompatible RAID firmware and drivers that will cause installation failure or system instability. In general disk changes are supported only for spares (vs. relying on Cisco SMARTnet coverage and RMA), or to enable upgrading to a new Cisco Unified Communications Manager release. Cisco does not support migrating from one server class to another via CPU, RAM, or disk changes.

Match the SKU in Table 39 with the model generation of the server you use. This section only contains SKUs for latest and greatest server generations. If you need disk drives for an older server generation, please see the ordering guides for Cisco Unified Communications 7.1 and 8.0.

Cisco no longer stocks HP components. . Order these direct from the HP using exact part numbers at www.cisco.com/go/swonly .

Table 38. Cisco MCS 7800 Hard Drives

Product Number	Description	List Price (\$US)
HDD-78xx-I5-250=	Spare 250GB Hard Disk Drive for MCS 7816/25/28-I5	
HDD-7835-I3-146=	Spare 146-GB 10K SAS Hard Disk drive for MCS-7835-I3	
HDD-7845-I3-146=	Spare 146-GB 10K SAS Hard Disk drive for MCS-7845-I3	

f. Rail Kits

All currently shipping Cisco MCS 7800 servers include a “generic/third-party rail kit”.

- Compliant with 19-inch Industry-standard EIA-310D
- Depth range of the slides is from 440mm to 790mm
- Threaded racks: M6, 10-32, and 12-24
- Also enables punched round and square hole racks

Use native HP/IBM documents for instructions on installing the rail kits.

If you require rail kits for a different rack type (such as telco racks or HP or IBM proprietary racks), order that directly from IBM or HP. Cisco does not provide SKUs for rail kits.

g. Fan Modules

Cisco does not provide SKUs for fan spares on the latest Cisco MCS 7800 models. Order these direct from the server vendor using exact part numbers at www.cisco.com/go/swonly.

h. Power Supplies
Cisco does not provide SKUs for power supply spares on the latest Cisco MCS 7800 models. Order these direct from the server vendor using exact part numbers at www.cisco.com/go/swonly.

i. Power Cords
Cisco supports Direct Current (DC) power supplies on select IBM server configurations purchased as "Software-only" from IBM. See www.cisco.com/go/swonly for more details.

Note: At this time Cisco MCS 7800 does not support Direct Current (DC) power supplies, only Alternating Current (AC) power supplies. DC power supplies affect features such as environmental instrumentation, auto-restart behavior, and UPS integration, and therefore are not supported.

In the SKUs for the Cisco MCS 7800, Cisco provides options for configuring AC power cords for various countries, and these cords will ship with the MCS (either one or two depending on the number of power supplies used by the Cisco MCS 7800 model). IBM may also ship additional power-cord types with some of its models.

Customers requiring a different power-cord type (such as hooded power cords, or male/female connector variants for hookup to a UPS) should consult HP/IBM directly for what is supported. The power cords are available from HP/IBM as well as several third parties. Cisco does not provide SKUs for these power-cord variants.

j. Service Processors

MCS 7835/45-I3 and MCS 7816/25/28-I5 have partial support for IBM's Integrated Management Module (IMM) service processor.

- MCS 7835/45-I3 ship with this hardware.
- MCS 7816/25/28-I5 do NOT ship with this hardware. Customers may order direct from IBM and install themselves.
- UC apps have no integration with IMM firmware, software, licensing or user interfaces.
- IMM feature support by UC is limited to remote console and remote power management. Other features such as remote media are not supported.
- Above support includes Software-only equivalents based on IBM x3650-M2 and x3250-M3 as described at www.cisco.com/go/swonly

MCS 7835/45-I2 and MCS 7816/25/28-I3 and-I4 have partial support for IBM's Remote Supervisor Adapter II (RSA II).

- MCS 7835/45-I2 ship with this hardware.
- MCS 7816/25/28-I3 and –I4 do NOT ship with this hardware. Customers may order direct from IBM and install themselves.
- UC apps have no integration with RSA II firmware, software, licensing or user interfaces.
- RSA II feature support by UC is limited to remote console and remote power management. Other features such as remote media are not supported.
- Above support includes Software-only equivalents based on IBM x3650, x3250, and x3250-M2 as described at www.cisco.com/go/swonly

MCS 7835/45-H2, MCS 7825/28-H3 and MCS 7825-H4 have partial support for HP's Remote Integrated Lights Out (RiLO, iLO or iLO2).

- MCS 7835/45-H2 ship with this hardware.
- All other HP MCS servers do NOT ship with this hardware. Customers may order direct from HP and install themselves.
- UC apps have no integration with iLO firmware, software, licensing or user interfaces.
-
- iLO feature support by UC is limited to remote console and remote power management. Other features such as remote media are not supported.
- Above support includes Software-only equivalents based on HP DL380G6, DL380G5, DL320-G5p and DL320-G5 as described at www.cisco.com/go/swonly.

See also the document "Technical Prep for Migrating to Cisco UCM 6.1" at the Partner Migration site at <http://www.cisco.com/go/ucmigration>

Note that the above support applies only to service processor features that Cisco supports. If after installation the customer installs a service processor license that enables additional features, or tries to use additional features that are not listed as supported by Cisco, then the customer will not be supported by Cisco even if the features seem to "work".

5.4 Server Migrations

If the customer wants to transfer software licenses to a new, better, or otherwise different physical server, consult the Ordering Guide for your software to see if any prerequisite or additional steps are required.

Specifically for Cisco Unified Communications Manager, server migrations as part of an upgrade from DLU licensing to User Connect Licensing do not require Hardware Migration SKUs.

6. Cisco Emergency Responder 8.5

6.1 Cisco Emergency Responder Release 8.5 Highlights

Pricing and ordering for Cisco Emergency Responder 8.5 are similar to Cisco Emergency Responder 8.0, but have changed significantly from earlier releases. Cisco Emergency Responder 8.5 server software and user licenses are ordered together as part of a configurable product part number. Cisco Emergency Responder 8.5 is priced only according to the number of users supported. There is no additional pricing for Cisco Emergency Responder 8.5 server software and no dependence on the class of hardware server on which it will be installed.

6.2 New Systems

Orders for new deployments of Cisco Emergency Responder 8.5 should follow these steps:

1. Determine the number of Cisco Emergency Responder user licenses to order.
2. Determine the number of Cisco Emergency Responder 8.5 software servers to order.
3. Order Cisco Emergency Responder user licenses and Cisco Emergency Responder 8.5 software servers together
4. Select and order separately appropriate Media Convergence Servers or Unified Computing System (optional)

Each of these steps is described in more detail below. Product part numbers and prices are included for your reference. Corresponding product part numbers and prices for Cisco Unified Communications Software Subscription are also included.

Cisco Unified Communications Software Subscription purchased together with the Cisco Emergency Responder is recommended. Refer to the [UCSS section of this guide](#) for a complete list of corresponding product part numbers and prices. UCSS is a subscription product that entitles customers to major software version upgrades when linked to an active Cisco Unified Essential Operate Services (ESW) service contract. Customers who purchase UCSS receive major software version upgrades at no additional charge for the duration of the subscription.

1. Determine the number of Cisco Emergency Responder user licenses to order.

Each Cisco Emergency Responder 8.5 server or redundant pair must be licensed separately. One Cisco Emergency Responder user license corresponds to one device. Cisco Emergency Responder user licenses are required for all types of devices capable of placing emergency calls, including wired IP phones, wireless IP phones, software telephony clients, and analog gateway FXS ports. Note that a minimum order of 100 Cisco Emergency Responder user licenses is required for new systems.

Cisco Emergency Responder user licenses are shared by both Cisco Emergency Responder 8.5 servers in a redundant pair. There is no need to order duplicate Cisco Emergency Responder user licenses.

2. Determine the number of Cisco Emergency Responder 8.0 servers to order.

For redundancy and increased availability, two Cisco Emergency Responder 8.5 servers are highly recommended for each Cisco Unified Communications Manager cluster to be supported. Nonredundant deployments are also supported with one Cisco Emergency Responder 8.5 server for each Cisco Unified Communications Manager cluster. One Cisco Emergency Responder 8.5 server or a redundant pair of servers can support multiple Cisco Unified Communications Manager clusters under the following conditions:

- All Cisco Unified Communications Manager clusters are on the same minor version (such as 7.1 or 8.5).
- All Cisco Unified Communications Manager servers are co-located with all Cisco Emergency Responder servers. Clustering over the WAN is supported.

- The total number of phones supported on all Cisco Unified Communications Manager clusters does not exceed the capacity of the Cisco Emergency Responder servers.
- 3. Order the desired quantity of Cisco Emergency Responder user licenses and Cisco Emergency Responder 8.5 software servers.**

Select product part numbers from Table 39. The table also provides an example UCSS product number and price that corresponds with Cisco Emergency Responder.

Table 39. Cisco Emergency Responder Product Part Numbers for New Systems

Product Number	Description	List Price (\$US)	UCSS Product Number (3 Year)	UCSS List Price (\$US) (3 Year)
EMRGNCY-RSPNDR	Cisco Emergency Responder Top Level	\$0	UCSS-ER	\$0
ER-USR-LIC-10-NEW	Cisco Emergency Responder 10 User License New	\$200	UCSS-ER-3-10	\$42
ER85-SW-NEW-K9	Cisco Emergency Responder 8.5 Server Software New	\$0		

4. Select an appropriate MCS or UCS server (optional):

Cisco Emergency Responder 8.5 supports the Cisco Unified Computing System models and configurations described in Section 4 of this ordering guide.

Cisco Emergency Responder 8.5 also supports the Cisco Media Convergence Servers and direct HP or IBM “software-only” equivalents described in Section 5 of this ordering guide, except for MCS 7828 models.

To purchase a Cisco Unified Computing System, follow the instructions in Section 4.

To purchase a Cisco Media Convergence Server, follow the instructions for purchasing “bare-metal” hardware in Section 5.

To purchase a “Software-only” configuration direct from HP or IBM, see <http://www.cisco.com/go/swonly>.

For each Cisco Emergency Responder 8.5 server or redundant pair, determine how many phones will be supported on the corresponding Cisco Unified Communications Manager cluster(s). Include wired IP phones, wireless IP phones, software telephony clients, and analog gateway FXS ports.

The capacity of a Cisco Emergency Responder 8.5 system varies based on the server platform and Virtual Machine (VM) resources.

Select a class of hardware server and VM resource profile, if applicable, that supports adequate Cisco Emergency Responder 8.5 system capacity for IP phones, analog gateway ports, and other components, according to Table 40.

Cisco Emergency Responder hardware model/generation support is documented in the release notes at http://www.cisco.com/en/US/products/sw/voicesw/ps842/prod_release_notes_list.html.

For more information on Emergency Response Locations (ERLs) and roaming IP phones, consult the Cisco Emergency Responder 8.5 Administration Guide at http://www.cisco.com/en/US/products/sw/voicesw/ps842/prod_maintenance_guides_list.html.

Table 40. Cisco Emergency Responder 8.5 System Capacity

	MCS-7816	MCS-7825 UCS-C200 with 12K User Template	MCS-7835 UCS-B200 or UCS-C210 with 20K User Template	MCS-7845 UCS-B200 or UCS-C210 with 30K User Template
Automatically Tracked IP Phones	6,000	12,000	20,000	30,000
Manually Configured Analog Phones	1,000	2,500	5,000	10,000
Roaming IP Phones (per Cisco Emergency Responder cluster)	600	1,200	2,000	3,000

LAN Switches	200	500	1,000	2,000
LAN Switch Ports	12,000	20,000	60,000	120,000
Emergency Response Locations (ERLs)	1,000	3,000	7,500	10,000

6.3 Additional User Licenses

Additional Cisco Emergency Responder user licenses may be ordered at any time, provided that the Cisco Emergency Responder 8.5 system capacity for the class of hardware server, as shown in Table 41, will not be exceeded. Table 41 includes the corresponding monthly UCSS product part numbers and prices, which may be used to align UCSS for the additional user licenses with the term of an existing UCSS contract.

Table 41. Cisco Emergency Responder Product Part Numbers for Adding User Licenses

Product Number	Description	List Price (\$US)	UCSS Product Number (1 Month)	UCSS List Price (\$US)
EMRGNCY-RSPNDR	Cisco Emergency Responder Top Level	\$0	UCSS-ER	\$0
ER-USR-LIC-10-ADD	Cisco Emergency Responder 10 User License Additional	\$200	UCSS-ER-1MO-10	\$2
L-EMRGNCY-RSPNDR	Cisco Emergency Responder Top Level eDelivery	\$0	L-UCSS-ER	\$0
L-ER-USR-LIC-10-ADD	Cisco Emergency Responder 10 User License Additional eDelivery	\$200	L-UCSS-ER-1MO-10	\$2

6.4 Upgrades and Migrations

6.4.1 Upgrades with UCSS

Customers with UCSS should use the Product Upgrade Tool (PUT) at <http://tools.cisco.com/gct/Upgrade/jsp/index.jsp> to order the desired quantity of Cisco Emergency Responder 8.5 server software from Table 42.

Table 42. Cisco Emergency Responder Product Part Numbers for Upgrades with UCSS

Product Number	Description	List Price (\$US)	UCSS Product Number (3 Year)	UCSS List Price (\$US) (3 Year)
ER80-SW-U27-K9=	Cisco Emergency Responder 8.5 Server Software Upgrade 2.0, 7.0 or 7.1 for PUT Only	\$0		
ER80-SW-U80-K9=	Cisco Emergency Responder 8.5 Server Software Upgrade 8.0 for PUT Only	\$0		

6.4.2 Migrations

Customers adding UCSS and upgrading to Cisco Emergency Responder 8.5 from Cisco Emergency Responder 2.0, Cisco Emergency Responder 7.0, Cisco Emergency Responder 7.1 or Cisco Emergency Responder 8.0 may order the desired quantity of Cisco Emergency Responder user licenses and Cisco Emergency Responder 8.5 server software from Table 43.

Table 43. Cisco Emergency Responder Product Part Numbers for Migrations

Product Number	Description	List Price (\$US)	UCSS Product Number (3 Year)	UCSS List Price (\$US) (3 Year)
EMRGNCY-RSPNDR	Cisco Emergency Responder Top Level	\$0	UCSS-ER	\$0
ER-USR-LIC-10-MIG	Cisco Emergency Responder 10 User License Migration	\$30	UCSS-ER-3-10	\$42
ER80-SW-U27-K9	Cisco Emergency Responder 8.5 Server Software Upgrade 2.0, 7.0 or 7.1	\$0		
ER80-SW-U80-K9	Cisco Emergency Responder 8.0 Server Software Upgrade 8.0	\$0		

In this case, customers must order equal quantities of Cisco Emergency Responder user licenses and the corresponding UCSS for 3 (or 5) years.

6.4.3 Upgrades without UCSS

Customers not adding UCSS and upgrading to Cisco Emergency Responder 8.5 from Cisco Emergency Responder 2.0, Cisco Emergency Responder 7.0, or Cisco Emergency Responder 7.1 may order the desired quantity of Cisco Emergency Responder user licenses and Cisco Emergency Responder 8.5 server software from Table 48.

Direct upgrades from Cisco Emergency Responder 1.3 to Cisco Emergency Responder 8.5 are not supported. Customers must first complete an upgrade to Cisco Emergency Responder 2.0, Cisco Emergency Responder 7.0, or Cisco Emergency Responder 7.1. See the previous versions of this Ordering Guide for information on upgrades to versions of Cisco Emergency Responder earlier than 8.0.

Cisco Unified Communications Software Subscription purchased together with the Cisco Emergency Responder upgrade is highly recommended. Refer to the UCSS section of this guide for a complete list of corresponding product part numbers and prices. Table 44 provides examples of UCSS product numbers and prices that correspond with Cisco Emergency Responder.

Table 44. Cisco Emergency Responder Product Part Numbers for Upgrades

Product Number	Description	List Price (\$US)	UCSS Product Number (3 Year)	UCSS List Price (\$US) (3 Year)
EMRGNCY-RSPNDR	Cisco Emergency Responder Top Level	\$0	UCSS-ER	\$0
ER-USR-LIC-10-UPG	Cisco Emergency Responder 10 User License Upgrade	\$100	UCSS-ER-3-10	\$42
ER80-SW-U27-K9	Cisco Emergency Responder 8.0 Server Software Upgrade 2.0, 7.0 or 7.1	\$0		
ER80-SW-U80-K9	Cisco Emergency Responder 8.0 Server Software Upgrade 8.0	\$0		

6.5 Non-Production Systems (NPS), Also Known As “Not For Resale” (NFR)

Cisco Emergency Responder user licenses for 100 users and Cisco Emergency Responder 8.5 server software are included in the Cisco Unified Communications System 8.0 Not For Resale (NFR) (Table 45). No Cisco Emergency Responder 8.5 NFR is available separately.

Table 45. Cisco Emergency Responder 8.0 Not For Resale

Product Number	Description	List Price (\$US)	UCSS Orderable?
UC-8.5-K9-NFR	Cisco Unified Communications 8.0 Not For Resale Top Level	\$275	No

7. Cisco Unified Enterprise, Business, & Department Attendant Consoles

7.1 New Systems

Note: SKUs for Attendant Consoles are not version-specific. Ordering one of these SKUs entitles you to download the version that is compatible with your Cisco Unified Communications Manager.

Ordering Cisco Unified Enterprise, Business, or Department Attendant Consoles requires the use of the Cisco Dynamitic Configuration Tool.

The steps for ordering the Cisco Unified Enterprise Attendant Console are as follows:

1. Access the Cisco Dynamic Configuration Tool on cisco.com.
2. Input "CUE-ATT-CON=" in the Dynamic Configuration Tool to begin the configuration.
3. When the Configuration Tool appears, click the gray "Select Options" tab.
4. Then click the text entitled "Cisco Unified Enterprise Attendant Console options," which is located on the left side of the Configuration Tool below text "STEP 1: Select Item Category".
5. On the right side of the Configuration tool, under "STEP 2: Choose Options and Select Desired Quantity Below," select from 1 to 25 Cisco Unified Enterprise Attendant Consoles.
6. Click the blue "Check Configuration" and "Save Configuration" boxes.
7. If UCSS is required please see Table 45 for ordering examples or Section 7 for the complete list of corresponding product numbers and prices.

Table 46. New Systems

Product Number	Description	List Price (\$US)	UCSS Product Number	UCSS List Price (\$US) (3 Year)
CUE-ATT-CON	Product Code for the Cisco Unified Enterprise Attendant Console	\$2,950	UCSS-ATT-CUE-3-1	\$945
CUB-ATT-CON	Product Code for the Cisco Unified Business Attendant Console	\$2,195	UCSS-ATT-CUB3-1	\$863
CUD-ATT-CON	Product Code for the Cisco Unified Department Attendant Console	\$1,395	UCSS-ATT-CUD3-1	\$550

The steps for ordering the Cisco Unified Business Attendant Console are as follows:

1. Access the Cisco Dynamic Configuration Tool on Cisco.com.
2. Input "CUB-ATT-CON=" in the Dynamic Configuration Tool to begin the configuration.
3. When the Configuration Tool appears, click the gray "Select Options" tab.
4. Then click the text entitled "Cisco Unified Business Attendant Console options," which is located on the left side of the Configuration Tool below text "STEP 1: Select Item Category".
5. On the right side of the Configuration tool, under "STEP 2: Choose Options and Select Desired Quantity Below," select from 1 to 6 Cisco Unified Business Attendant Consoles.
6. Click the blue "Check Configuration" and "Save Configuration" boxes.
7. If UCSS is required please see Table 45 for ordering examples or Section 7 for the complete list of corresponding product numbers and prices.

The steps for ordering the Cisco Unified Department Attendant Console are as follows:

1. Access the Cisco Dynamic Configuration Tool on cisco.com.

2. Input "CUD-ATT-CON=" in the Dynamic Configuration Tool to begin the configuration.
3. When the Configuration Tool appears, click the gray "Select Options" tab.
4. Then click the text entitled "Cisco Unified Department Attendant Console options," which is located on the left side of the Configuration Tool below text "STEP 1: Select Item Category".
5. On the right side of the Configuration tool, under "STEP 2: Choose Options and Select Desired Quantity Below," select from 1 to 10 Cisco Unified Department Attendant Consoles.

Note: To configure more than one department on a server, each preceding department must have two operators licensed. For example, to configure two departments, the first department must have two operators licensed before the second department is configurable.

6. Click the blue "Check Configuration" and "Save Configuration" boxes.
7. If UCSS is required please see Table 45 for ordering examples or Section 7 for the complete list of corresponding product numbers and prices.

7.2 Add-ons

Add-ons are not applicable for these products.

7.3 Upgrades

Upgrades are not applicable for these products.

7.4 Migrations

Migrations are not applicable for these products.

7.5 Platforms for Servers/Clients

Table 46 lists the hardware and operating system requirements for software servers and clients.

Server Requirements for the Cisco Unified Enterprise Attendant Console

The server software for the Cisco Unified Enterprise Attendant Console must be installed to a dedicated Windows hardware server.

Table 47. Hardware and Operating System Requirements for Software Servers and Clients

Cisco Unified Enterprise Attendant Console Server	Pentium IV 2.2 GHz or better 2-GB RAM 80-GB hard disk drive 100/1000 network card CD-ROM/DVD drive SVGA (1024 x 768) display card with correct drivers Windows 2003 Server with SP2 running Windows English Regional settings; Windows 2008 Server is also supported .Net Framework 3.5** MS SQL Server 2008 (Express)* Internet Information Service (IIS) 6.0 (or later)** <small>* Note: The Cisco Unified Business Attendant Console Server installation installs these applications automatically. If MS SQL Express 2008 is installed manually, it must be installed as the Default instance for the attendant console to function. Cisco Unified Business and Cisco Unified Department Attendant applications will not work with a Named instance of SQLExpress.</small> <small>** Note: IIS is installed separately to the Cisco Unified Business Attendant Console Server Installation, and the ASP.NET component must be enabled and installed. This process is done through the Add/Remove Windows Component > Applications Server and Details.</small>
--	---

Client Requirements for the Cisco Unified Enterprise Attendant Console

The operator client for the Cisco Unified Enterprise Attendant Console requires the PC specifications listed in Table 47. Cisco Unified Enterprise Attendant Console client software can be installed on many PCs, but only up to 25 operators can be licensed per Cisco Unified Enterprise Attendant Console server.

Table 48. PC Specifications for Operator Client for Cisco Unified Enterprise Attendant Console

Cisco Unified Enterprise Attendant Console Client	Pentium IV Entry Level Specification 1-GB RAM 3-GB available hard disk drive 100 network card CD-ROM/DVD drive SVGA (1024 x 768) display card with correct drivers Sound card 17-in. monitor (highly recommended) Windows Small Fonts Windows Vista Professional plus SP2 (32 bit) or Windows XP Professional with SP2
--	---

Server Requirements Software for the Cisco Unified Business Attendant Console

The server software for the Cisco Unified Business Attendant Console can be installed to a dedicated hardware server or can be loaded on a desktop PC running Windows 2003 Server or Windows 2008 Server. For mission-critical installations, a dedicated hardware server is recommended, because shutting off the PC server will cause the Cisco Unified Business Attendant Console to lose Cisco Unified Communications Manager connectivity. Table 48 lists the minimum hardware server requirements.

Table 49. Hardware Server Requirements for Cisco Unified Business Attendant Console

Cisco Unified Business Attendant Console Server	Pentium IV 2.2 GHz or better 2-GB RAM 80-GB hard disk drive 100/1000 network card CD-ROM/DVD drive SVGA (1024 x 768) display card with correct drivers Windows 2003 Server with SP2 running Windows English Regional settings; Windows 2008 Server is also supported .Net Framework 3.5** MS SQL Server 2008 (Express)* Internet Information Service (IIS) 6.0 (or later)** * Note: The Cisco Unified Business Attendant Console Server installation installs these applications automatically. If MS SQL Express 2008 is installed manually, it must be installed as the Default instance for the attendant console to function. Cisco Unified Business and Cisco Unified Department Attendant applications will not work with a Named instance of SQLEXPRESS. ** Note: IIS is installed separately to the Cisco Unified Business Attendant Console Server Installation, and the ASP.NET component must be enabled and installed. This process is done through the Add/Remove Windows Component > Applications Server and Details.
--	--

Client Requirements for the Cisco Unified Business Attendant Console

The operator client for the Cisco Unified Business Attendant Console requires the PC specifications listed in Table 49. Cisco Unified Business Attendant Console client software can be installed on many PCs, but only up to 6 operators can be licensed per Cisco Unified Business Attendant Console server.

Table 50. Client Requirements for Cisco Unified Business Attendant Console

Cisco Unified Business Attendant Console Client	Pentium IV Entry Level Specification 1-GB RAM 3-GB available hard disk drive 100 network card CD-ROM/DVD drive SVGA (1024 x 768) display card with correct drivers
--	---

	Sound card 17-in. monitor (highly recommended) Windows Small Fonts Windows Vista Professional plus SP2 (32 bit) or Windows XP Professional with SP2
--	--

Server Requirements for the Cisco Unified Department Attendant Console

The server software for the Cisco Unified Department Attendant Console can be installed to a dedicated hardware server or can be loaded on a desktop PC running Windows 2003 Server or Windows 2008 server. If the dedicated hardware server approach is used, up to 5 departments, each with 150 Cisco Unified IP phones and 2 operator clients, can be supported with a single PC server. For mission-critical installations, a dedicated hardware server is recommended because shutting off the PC server will cause the Cisco Unified Department Attendant Console to lose Cisco Unified Communications Manager connectivity. Table 50 lists the minimum hardware server requirements.

Table 51. Server Requirements for Cisco Unified Department Attendant Console

Cisco Unified Department Attendant Console Server	Pentium IV 2.2 GHz or better 2-GB RAM 80-GB hard disk drive 100/1000 network card CD-ROM/DVD drive SVGA (1024 x 768) display card with correct drivers Windows 2003 Server with SP2 running Windows English Regional settings; Windows 2008 Server is also supported .Net Framework 3.5** MS SQL Server 2008 (Express)* Internet Information Service (IIS) 6.0 (or later)** <small>* Note: The Cisco Unified Business Attendant Console Server installation installs these applications automatically. If MS SQL Express 2008 is installed manually, it must be installed as the Default instance for the attendant console to function. Cisco Unified Business and Cisco Unified Department Attendant applications will not work with a Named instance of SQLExpress.</small> <small>** Note: IIS is installed separately to the Cisco Unified Business Attendant Console Server Installation, and the ASP.NET component must be enabled and installed. This process is done through the Add/Remove Windows Component > Applications Server and Details.</small>
---	---

Client Requirements for Department Attendant Console

The Department Administrator (operator client) for the Cisco Unified Department Attendant Console requires the PC specifications listed in Table 51. Cisco Unified Department Attendant Console client software can be installed on many PCs throughout a department, but only two operators can be licensed per department.

Table 52. Client Requirements for Department Attendant Console

Cisco Unified Business Attendant Console Client	Pentium IV Entry Level Specification 1-GB RAM 3-GB available hard disk drive 100 network card CD-ROM/DVD drive SVGA (1024 x 768) display card with correct drivers Sound card 17-in. monitor (highly recommended) Windows Small Fonts Windows Vista Professional plus SP2 (32 bit) or Windows XP Professional with SP2
---	---

7.6 Non-Production Systems (NPS), Also Known As “Not For Resale” (NFR)

Demonstration software can be downloaded at no cost for 60 days at: <http://www.cisco.com/go/ac>.

8. Cisco Unified Communications Manager Session Management Edition

8.1 New Systems

Cisco Unified Communications Manager Session Management Edition 8.0 (CUCM-SME 8.0) is the latest release of the product originally introduced in Cisco Unified Communications 7.1(3). Cisco Unified Communications Manager Session Management Edition builds on the extensible Cisco Unified Communications Manager to deliver functions for centralized call-control routing, application integration, and policy.

This section covers greenfield deployments. To include Cisco Unified Communications Software Subscription (UCSS) with an order, see the section of this ordering guide as well as http://www.cisco.com/web/partners/sell/technology/ipc/integrated-solutions/Unified_Communications_Software_Subscription.html.

To order Cisco Unified Communications Manager Session Management Edition (SME) 8.0, do the following, explained in more detail afterward:

1. Start with the “top-level” SKU for CUCM-SME (Table 52).
2. Order Sessions.
3. Order Call-Control Options.
4. Order Unified Communications Software Subscription (UCSS).

Step 1. In the Dynamic Configuration Tool (DCT), start with the “top-level” part number for ordering Cisco Unified Communications Manager Session Management Edition (Table 52).

Table 53. “Top-level” Part Number for Ordering Cisco UCM-SME

Product Number	Description	List Price (\$US)	UCSS Orderable?
SME-SESSION-LIC	Unified Connect Licensing - Top Level part Number For UCM-SME Systems	\$0	See tables below

Select the Top-Level part number (SME-SESSION-LIC) from Table 52 to order new Cisco Unified Communications Manager SME 8.0 system licensing and media.

Step 2. Determine the appropriate number of Sessions. The number of Sessions is the number of Concurrent Calls that will be supported through the Cisco Unified Communications Manager Session Management Edition 8.0 system. Table 53 defines different User Connect Licenses.

Table 54. Cisco Unified Communications Manager SME Session Licenses

Product Number	Description	List Price (\$US)	UCSS Orderable?
LIC-SME-SESSION	1 SME Session License	\$50	Y

Step 3. Select the Call-Control Options (Table 54). One is required for each server running Cisco Unified Communications Manager Session Management Edition.

Table 55. Call-Control Options

Product Number	Description	List Price (\$US)	Number of Nodes	UCSS Orderable?
SME-7845-70	UCM-SME 7	\$0	0 to 15	N
SME-7845-85	UCM-SME 8.5	\$0	0 to 15	N

Step 4. UCSS is optional though highly recommended. Add appropriate UCSS options per session. Select the appropriate Top-Level UCSS Product Number (Table 55).

Table 56. UCSS Top-level SKUs

Product Number	Description	List Price (\$US)
UCSS-SME	UCSS - Top Level part Number For Ordering SME 8.0 Systems	\$0
L-UCSS-SME	UCSS - Top Level part Number For Ordering SME 8.0 Systems for Electronic Delivery	\$0

If you select UCSS-SME, the UCSS options for different terms are listed in Table 56.

Table 57. UCSS options for CUCM-SME Licensing (Paper Delivery)

Top Level UCSS-UCM	Description (Paper)	List Price (\$US)
UCSS for LIC-SME-SESSION		
UCSS-SME-1M-1	UCSS for 1 User for 1 month	\$1.00
UCSS-SME-1-1	UCSS for 1 User for 1 year	\$5.00
UCSS-SME-2-1	UCSS for 1 User for 2 years	\$9.00
UCSS-SME-3-1	UCSS for 1 User for 3 years	\$11.00
UCSS-SME-5-1	UCSS for 1 User for 5 years	\$18.00

If you select L-UCSS-SME, the UCSS options for different terms are listed in Table 57.

Table 58. UCSS options for CUCM-SME (Electronic Delivery)

Top Level L-UCSS-UCM	Description (eDelivery)	List Price (\$US)
UCSS for LIC-SME-SESSION		
L-UCSS-SME-1M-1	UCSS for 1 User for 1 month	\$1.00
L-UCSS-SME-1-1	UCSS for 1 User for 1 year	\$5.00
L-UCSS-SME-2-1	UCSS for 1 User for 2 years	\$9.00
L-UCSS-SME-3-1	UCSS for 1 User for 3 years	\$11.00
L-UCSS-SME-5-1	UCSS for 1 User for 5 years	\$18.00

For detailed UCSS options, refer to “Cisco Unified Communications Software Subscription (UCSS)”.

8.2 Upgrades and Migrations

Do the following:

- Step 1. Verify the existing server can support the new Cisco Unified Communications Manager Session Management Edition version. Even if the chassis is supported, a memory or disk upgrade may be required to support the new software version. If a memory or disk upgrade is required on the existing server, follow instructions in the Media Convergence Servers section under Component Changes. If your existing server will not work with the new Cisco Unified Communications Manager Session Management Edition version, a Server Migration as previously described will be required.
- Step 2. Check to ensure that the direct upgrade path(s) - single or multiple hops - that you plan to use to execute the upgrade are supported. If your current “from” version is not supported to upgrade to your “to” version, then a multihop upgrade path will be required. For example, 6.1(3) > 8.0(1) is a single-hop direct upgrade path, but 6.1(1) requires a multihop path 6.1(1) > 6.1(3) > 8.0(1).
- Step 3. If you **are** covered by UCSS, the new Cisco Unified Communications Manager Session Management Edition 8.0 version can be obtained from the Product Upgrade Tool at <http://www.cisco.com/upgrade> (see previous section, Tips for Using this Ordering Guide - 8.0 images are available only on DVD; you cannot download them from Cisco.com).
- Step 4. If you **are not** covered by UCSS, then you have one of the following options. The text and tables below will provide specific information for from/to upgrade versions.

a. (Recommended) Purchase UCSS as part of the migration to 8.0, and convert a la carte to User Connect Licensing via “UCL Software **Migration**” SKUs and Call-Control Option SKUs. The customer is covered by UCSS after the upgrade/migration.

b. Do **not** purchase UCSS as part of the migration to 8.0, and convert a la carte to User Connect Licensing via “UCL Software **Upgrade**” SKUs and Call-Control Option SKUs. The customer is still **not** covered by UCSS after the upgrade/migration.

Cisco Unified Communications Software Subscription, or UCSS, is a subscription product that entitles customers to major software version upgrades when linked to an active Cisco Unified Essential Operate Services (ESW) service contract. Customers who purchase UCSS receive major software version upgrades at no additional charge for the duration of the subscription.

Convert to User Connect Licensing via “UCL Software Migration SKU with UCSS”

Step 1. In the Dynamic Configuration Tool (DCT), start with the “top-level” part number SME-SESSION-LIC from Table 58.

Step 2. Select the part numbers and the quantity of sessions that are to be migrated from a la carte.

Table 59. Cisco UCL Software Migration SKUs (UCSS Required) for Cisco Unified Communications Manager Session Management Edition

Product Number	Description	List Price (\$US)	UCSS Orderable?
MIG-SME-SESSION	Upgrade 1 Session	\$3	Y

Step 3. You **must** select one of the UCSS options listed in Table 59 to go with your UCL Software Migration SKU:

1. By default, you must purchase a mandatory 3-year UCSS.
2. Higher Education or Government customers may optionally instead choose a 1-year UCSS.
3. Any customer may optionally instead choose a 5-year UCSS.

Table 60. UCSS Options for Cisco Unified Communications Manager Session Management Edition Migration SKU

MIG SKU	SME Session Migration Options	List Price (\$US)
MIG-SME-SESSION	Upgrade 1 UCM-SME Session	\$3.00
UCSS-SME-1-1	Only For Govt/Hr. Ed	\$5.00
UCSS-SME-3-1	Mandatory Attach	\$11.00
UCSS-SME-5-1	Can optionally be selected	\$18.00

For detailed UCSS options refer to “Cisco Unified Communications Software Subscription (UCSS)”.

Step 4. Select the call-control options, one for each Node that makes the Cisco Unified Communications Manager Session Management Edition cluster (Table 60). This process will deliver the appropriate media and the node licensing required to upgrade.

Table 61. Call-Control Options

Product Number	Description	List Price (\$US)	Number of Nodes	UCSS Orderable?
SME-7870	SME 7.x 7845	\$0	0 to 15	N
SME-7845-85	SME 8.5 7845	\$0	0 to 15	N

Convert to User Connect Licensing via “UCL Software Upgrade SKU without UCSS”

Step 1. In the Dynamic Configuration Tool (DCT), start with the “top-level” part number SME-SESSION-LIC from Table 61.

Step 2. Select the part numbers and quantity of users that are to be upgraded (Table 61).

Table 62. Cisco UCL Software Upgrade SKU for Cisco Unified Communications Manager Session Management Edition (without UCSS)

Product Number	Description	List Price (\$US)	Number of Nodes	UCSS Orderable?
LIC-SME-SESS-UPG	AI-Carte Upgrade for 1 Session	\$25	Min 200	Y

Step 3. Select the call-control options in Table 62, one for each Node that makes the Cisco Unified Communications Manager Session Management Edition cluster. This process will deliver the appropriate media and the node licensing required to upgrade.

Table 63. Call-Control Options for CUCM-SME

Product Number	Description	List Price (\$US)	Number of Nodes	UCSS Orderable?
UCM-7845-80	SME 8.0 7845	\$0	0 to 15	N

8.3 Add-ons

Additional sessions may be added after initial purchase.

Step 1. In the Dynamic Configuration Tool (DCT), start with the “top-level” part number SME-SESS-LIC-ADD, with list price \$50 (Table 63).

Step 2. From Table 63, select and order the appropriate quantity and type of Users that you needed to add. This SKU will deliver licensing but not media.

Table 64. Telephony and Mobility User Connect Licenses

Product Number	Description	List Price (\$US)	UCSS Orderable?
LIC-SME-SESS-ADD	1 SME Session License	\$50	Y

Step 3. UCSS, though optional, is highly recommended. Order UCSS using the previous instructions for New Systems.

8.4 Non-production Systems

9. Cisco Unified Communications Software Subscription (UCSS)

Cisco Unified Communications Software Subscription is a product that allows customers to receive major software version upgrades without cost for the duration of the subscription. It is available as a **one-, two-, three- or five-year subscription**. A valid Cisco Unified Communications Operate Services contract must be either in place or purchased with the Cisco Unified Communications Software Subscription.

Customers may order Cisco Unified Communications Software Subscription for Cisco Unified Communications Manager based on the number of users required. A user is defined as all administered users plus all public-space devices. A public-space device may be a conference room phone, a fax machine, or any other device that is on the Cisco Unified Communications Manager system that is not directly associated with a specific user. There are many different types of configured devices available for the Cisco Unified Communications Manager system, including but not limited to:

- Cisco Unified IP Phone
- Cisco Unified wireless IP phone
- Cisco Unified IP conference station
- Cisco IP Communicator
- Cisco Unified Personal Communicator
- Cisco Unified Video Advantage
- Third-party Session Initiation Protocol (SIP) phone
- Analog phone
- Fax Machine
- Modem
- Soft phone
- TelePresence device or screen

Unified Communications Software Subscription is available for Cisco Unified Communications Manager User Connect Licensing (UCL). Customers may order Unified Communications Software Subscription based on the number of User Connect Licenses from several categories of users:

- IP Users (Enhanced or Basic)
- Analog Users (also Application-Only User)
- Public-Space Users
- Video Users

Unified Communications Software Subscription is not available for Mobility User Connect Licenses because any major upgrades are part of Cisco Unified Communications Manager UCL, Basic or Enhanced. Unified Communications Software Subscription is not available for Adjunct User Connect Licenses (assigned Audio or Video Cisco Endpoint or Soft client) because any major upgrades are part of Cisco Unified Communications Manager UCL, Enhanced.

Unified Communications Software Subscription must be purchased for each individual cluster in a system. If an Essential Operate Service (ESW) contract has multiple sites, the order for Unified Communications Software Subscription should be structured to correspond with each site. The total number of Unified Communications Software Subscription users must meet or exceed the number of users or user licenses of the product deployment.

eDelivery is available for most Unified Communications Software Subscription products. eDelivery enables partners to order unique L-UCSS product part numbers and have entitlement documentation sent using electronic delivery capabilities. To order by eDelivery, follow the same ordering process but use L-UCSS part numbers. Simply place "L-" in front of the UCSS part number. Examples: L-UCSS-UCM, L-UCSS-ER.

For more information about UCSS, refer to: <http://www.cisco.com/go/ucss>.

Additional ordering and activation tips for partners can be found at:

http://www.cisco.com/en/US/partner/products/ps9158/products_partner_resources_list.html

For further assistance on UCSS quotation or ordering, please email the UCSS Support team at: ucss-support@external.cisco.com.

9.1 Cisco Unified Communications Manager UCSS

UCSS-UCM at \$0 is the top-level SKU for UCSS for Cisco Unified Communications Manager (Table 64). As with the Unified Connect Licensing, UCSS also follows a tiered structure, with option A being 0 to 999 Users, and option B being 1000 to 9999 users and option C being 10000 users and up.

Table 65. UCSS for Cisco Unified Communications Manager

UCSS-UCM-2-1-B	Two year UCSS - 1 Enhanced user	\$ 16
UCSS-UCM-3-1-B	Three year UCSS - 1 Enhanced user	\$ 22
UCSS-UCM-5-1-B	Five year UCSS - 1 Enhanced user	\$ 35
UCSS-UCM-1M-1	One Month UCSS - 1 Enhanced user	\$ 1
CUCM Enhanced User License		
UCSS options B	Price Bracket Applies for 1000 users and up	Pricing
UCSS-UCM-1-1-C	One year UCSS - 1 Enhanced user	\$ 5.00
UCSS-UCM-2-1-C	Two year UCSS - 1 Enhanced user	\$ 9.00
UCSS-UCM-3-1-C	Three year UCSS - 1 Enhanced user	\$ 13.00
UCSS-UCM-5-1-C	Five year UCSS - 1 Enhanced user	\$ 21.00
UCSS-UCM-1M-1	One Month UCSS - 1 Enhanced user	\$ 1
CUCM Basic User License		
UCSS options A	Price Bracket Applies for 1 to 999 Users	Pricing
UCSS-UCM-BAS-1-1-A	One year UCSS - 1 Basic user	\$ 7.00
UCSS-UCM-BAS-2-1-A	Two year UCSS - 1 Basic user	\$ 12.00
UCSS-UCM-BAS-3-1-A	Three year UCSS - 1 Basic user	\$ 15.00
UCSS-UCM-BAS-5-1-A	Five year UCSS - 1 Basic user	\$ 25.00
UCSS-UCM-BAS-1M-1	One Month UCSS - 1 Basic user	\$ 1
CUCM Basic User License		
UCSS options B	Price Bracket Applies for 1000 to 9999 Users	Pricing
UCSS-UCM-BAS-1-1-B	One year UCSS - 1 Basic user	\$ 5.00
UCSS-UCM-BAS-2-1-B	Two year UCSS - 1 Basic user	\$ 9.00
UCSS-UCM-BAS-3-1-B	Three year UCSS - 1 Basic user	\$ 12.00
UCSS-UCM-BAS-5-1-B	Five year UCSS - 1 Basic user	\$ 20.00
UCSS-UCM-BAS-1M-1	One Month UCSS - 1 Basic user	\$ 1
CUCM Basic User License UCSS options B	Price Bracket Applies for 1000 users and up	Pricing
UCSS-UCM-BAS-1-1-C	One year UCSS - 1 Basic user	\$ 3.00
UCSS-UCM-BAS-2-1-C	Two year UCSS - 1 Basic user	\$ 5.00
UCSS-UCM-BAS-3-1-C	Three year UCSS - 1 Basic user	\$ 7.00
UCSS-UCM-BAS-5-1-C	Five year UCSS - 1 Basic user	\$ 12.00
UCSS-UCM-BAS-1M-1	One Month UCSS - 1 Basic user	\$ 1
CUCM Essential User License UCSS options A	Price Bracket Applies for 1 to 999 Users	Pricing
UCSS-UCM-ESS-1-1-A	One year UCSS - 1 Essential user	\$ 3.00
UCSS-UCM-ESS-2-1-A	Two year UCSS - 1 Essential User	\$ 6.00
UCSS-UCM-ESS-3-1-A	Three year UCSS - 1 Essential User	\$ 7.00
UCSS-UCM-ESS-5-1-A	Five year UCSS - 1 Essential User	\$ 11.00
UCSS-UCM-ESS-1M-1	One Month UCSS - 1 Essential User	\$ 1.00

CUCM Essential User License UCSS options B	Price Bracket Applies for 1000 to 9999 Users	Pricing
UCSS-UCM-ESS-1-1-B	One year UCSS - 1 Essential User	\$ 2.00
UCSS-UCM-ESS-2-1-B	Two year UCSS - 1 Essential User	\$ 4.00
UCSS-UCM-ESS-3-1-B	Three year UCSS - 1 Essential User	\$ 5.00
UCSS-UCM-ESS-5-1-B	Five year UCSS - 1 Essential User	\$ 8.00
UCSS-UCM-ESS-1M-1	One Month UCSS - 1 Essential User	\$ 1.00
CUCM Essential User License UCSS options C	Price Bracket Applies for 1000 users and up	Pricing
UCSS-UCM-ESS-1-1-C	One year UCSS - 1 Essential User	\$ 1.00
UCSS-UCM-ESS-2-1-C	Two year UCSS - 1 Essential User	\$ 2.00
UCSS-UCM-ESS-3-1-C	Three year UCSS - 1 Essential User	\$ 3.00
UCSS-UCM-ESS-5-1-C	Five year UCSS - 1 Essential User	\$ 5.00
UCSS-UCM-ESS-1M-1	One Month UCSS - 1 Essential User	\$ 1.00
CUCM Public Space User License UCSS Options		Pricing
UCSS-PUB-1-1	One year UCSS - 1 Public Space User	\$ 11.00
UCSS-PUB-2-1	Two year UCSS - 1 Public Space User	\$ 19.00
UCSS-PUB-3-1	Three year UCSS - 1 Public Space User	\$ 23.00
UCSS-PUB-5-1	Five year UCSS - 1 Public Space User	\$ 39.00
UCSS-PUB-1M-1	One Month UCSS - 1 Public Space User	\$ 1.00
CUCM Desktop Video user License UCSS Options		Pricing
UCSS-TP-DTP-1-1	One year UCSS - 1 Desktop Video User	\$ 29.00
UCSS-TP-DTP-2-1	Two year UCSS - 1 Desktop Video User	\$ 50.00
UCSS-TP-DTP-3-1	Three year UCSS - 1 Desktop Video User	\$ 61.00
UCSS-TP-DTP-5-1	Five year UCSS - 1 Desktop Video User	\$ 102.00
UCSS-TP-DTP-1M-1	One Month UCSS - 1 Desktop Video User	\$ 3.00
Single Screen TelePresence User License UCSS Options		Pricing
UCSS-TP-SGL-1-1	UCSS for UCM for One Year - 1 user	\$ 65.00
UCSS-TP-SGL-2-1	UCSS for UCM for One Year - 1 user	\$ 111.00
UCSS-TP-SGL-3-1	UCSS for UCM for One Year - 1 user	\$ 137.00
UCSS-TP-SGL-5-1	UCSS for UCM for One Year - 1 user	\$ 228.00
UCSS-TP-SGL-1M-1		\$ 6.00
CUCM Multiple Screen TelePresence User License UCSS Options		Pricing
UCSS-TP-MULT-1-1	UCSS for UCM for One Year - 1 user	\$ 110.00
UCSS-TP-MULT-2-1	UCSS for UCM for One Year - 1 user	\$ 187.00
UCSS-TP-MULT-3-1	UCSS for UCM for One Year - 1 user	\$ 231.00

UCSS-TP-MULT-5-1	UCSS for UCM for One Year - 1 user	\$ 385.00
UCSS-TP-MULT-1M-1	UCSS for UCM for One Year - 1 user	\$ 10.00

The electronic delivery SKUs for UCSS are described in the below table:

CUCM Enhanced User License UCSS options A	Price Bracket Applies for 1 to 999 Users	Pricing
L-UCSS-UCM-1-1-A	One year UCSS - 1 Enhanced user	\$ 12
L-UCSS-UCM-2-1-A	Two year UCSS - 1 Enhanced user	\$ 21
L-UCSS-UCM-3-1-A	Three year UCSS - 1 Enhanced user	\$ 26
L-UCSS-UCM-5-1-A	Five year UCSS - 1 Enhanced user	\$ 42
L-UCSS-UCM-1M-1	One Month UCSS - 1 Enhanced user	\$ 1
CUCM Enhanced User License UCSS options B	Price Bracket Applies for 1000 to 9999 Users	Pricing
L-UCSS-UCM-1-1-B	One year UCSS - 1 Enhanced user	\$ 9
L-UCSS-UCM-2-1-B	Two year UCSS - 1 Enhanced user	\$ 16
L-UCSS-UCM-3-1-B	Three year UCSS - 1 Enhanced user	\$ 22
L-UCSS-UCM-5-1-B	Five year UCSS - 1 Enhanced user	\$ 35
L-UCSS-UCM-1M-1	One Month UCSS - 1 Enhanced user	\$ 1
CUCM Enhanced User License UCSS options B	Price Bracket Applies for 1000 users and up	Pricing
L-UCSS-UCM-1-1-C	One year UCSS - 1 Enhanced user	\$ 5.00
L-UCSS-UCM-2-1-C	Two year UCSS - 1 Enhanced user	\$ 9.00
L-UCSS-UCM-3-1-C	Three year UCSS - 1 Enhanced user	\$ 13.00
L-UCSS-UCM-5-1-C	Five year UCSS - 1 Enhanced user	\$ 21.00
L-UCSS-UCM-1M-1	One Month UCSS - 1 Enhanced user	\$ 1
CUCM Basic User License UCSS options A	Price Bracket Applies for 1 to 999 Users	Pricing
L-UCSS-UCMBAS-1-1-A	One year UCSS - 1 Basic user	\$ 7.00
L-UCSS-UCMBAS-2-1-A	Two year UCSS - 1 Basic user	\$ 12.00
L-UCSS-UCMBAS-3-1-A	Three year UCSS - 1 Basic user	\$ 15.00
L-UCSS-UCMBAS-5-1-A	Five year UCSS - 1 Basic user	\$ 25.00
L-UCSS-BAS-1M-1	One Month UCSS - 1 Basic user	\$ 1
CUCM Basic User License UCSS options B	Price Bracket Applies for 1000 to 9999 Users	Pricing
L-UCSS-UCMBAS-1-1-B	One year UCSS - 1 Basic user	\$ 5.00
L-UCSS-UCMBAS-2-1-B	Two year UCSS - 1 Basic user	\$ 9.00
L-UCSS-UCMBAS-3-1-B	Three year UCSS - 1 Basic user	\$ 12.00
L-UCSS-UCMBAS-5-1-B	Five year UCSS - 1 Basic user	\$ 20.00
L-UCSS-BAS-1M-1	One Month UCSS - 1 Basic user	\$ 1

CUCM Basic User License UCSS options B	Price Bracket Applies for 1000 users and up	Pricing
L-UCSS-UCMBAS-1-1-C	One year UCSS - 1 Basic user	\$ 3.00
L-UCSS-UCMBAS-2-1-C	Two year UCSS - 1 Basic user	\$ 5.00
L-UCSS-UCMBAS-3-1-C	Three year UCSS - 1 Basic user	\$ 7.00
L-UCSS-UCMBAS-5-1-C	Five year UCSS - 1 Basic user	\$ 12.00
L-UCSS-BAS-1M-1	One Month UCSS - 1 Basic user	\$ 1
CUCM Essential User License UCSS options A	Price Bracket Applies for 1 to 999 Users	Pricing
L-UCSS-UCMESS1-1-A	One year UCSS - 1 Essential user	\$ 3.00
L-UCSS-UCMESS2-1-A	Two year UCSS - 1 Essential User	\$ 6.00
L-UCSS-UCMESS3-1-A	Three year UCSS - 1 Essential User	\$ 7.00
L-UCSS-UCMESS5-1-A	Five year UCSS - 1 Essential User	\$ 11.00
L-UCSS-UCM-ESS-1M	One Month UCSS - 1 Essential User	\$ 1.00
CUCM Essential User License UCSS options B	Price Bracket Applies for 1000 to 9999 Users	Pricing
L-UCSS-UCMESS1-1-B	One year UCSS - 1 Essential User	\$ 2.00
L-UCSS-UCMESS2-1-B	Two year UCSS - 1 Essential User	\$ 4.00
L-UCSS-UCMESS3-1-B	Three year UCSS - 1 Essential User	\$ 5.00
L-UCSS-UCMESS5-1-B	Five year UCSS - 1 Essential User	\$ 8.00
L-UCSS-UCM-ESS-1M	One Month UCSS - 1 Essential User	\$ 1.00
CUCM Essential User License UCSS options C	Price Bracket Applies for 1000 users and up	Pricing
L-UCSS-UCMESS1-1-C	One year UCSS - 1 Essential User	\$ 1.00
L-UCSS-UCMESS2-1-C	Two year UCSS - 1 Essential User	\$ 2.00
L-UCSS-UCMESS3-1-C	Three year UCSS - 1 Essential User	\$ 3.00
L-UCSS-UCMESS5-1-C	Five year UCSS - 1 Essential User	\$ 5.00
L-UCSS-UCM-ESS-1M	One Month UCSS - 1 Essential User	\$ 1.00
CUCM Public Space User License UCSS Options		Pricing
L-UCSS-PUB-1-1	One year UCSS - 1 Public Space User	\$ 11.00
L-UCSS-PUB-2-1	Two year UCSS - 1 Public Space User	\$ 19.00
L-UCSS-PUB-3-1	Three year UCSS - 1 Public Space User	\$ 23.00
L-UCSS-PUB-5-1	Five year UCSS - 1 Public Space User	\$ 39.00
L-UCSS-PUB-1M-1	One Month UCSS - 1 Public Space User	\$ 1.00
CUCM Desktop Video user License UCSS Options		Pricing
L-UCSS-TP-DTP-1-1	One year UCSS - 1 Desktop Video User	\$ 29.00
L-UCSS-TP-DTP-2-1	Two year UCSS - 1 Desktop Video User	\$ 50.00
L-UCSS-TP-DTP-3-1	Three year UCSS - 1 Desktop Video User	\$ 61.00

L-UCSS-TP-DTP-5-1	Five year UCSS - 1 Desktop Video User	\$ 102.00
L-UCSS-TP-DTP-1M-1	One Month UCSS - 1 Desktop Video User	\$ 3.00
Single Screen TelePresence User License UCSS Options		Pricing
L-UCSS-TP-SGL-1-1	UCSS for UCM for One Year - 1 user	\$ 65.00
L-UCSS-TP-SGL-2-1	UCSS for UCM for One Year - 1 user	\$ 111.00
L-UCSS-TP-SGL-3-1	UCSS for UCM for One Year - 1 user	\$ 137.00
L-UCSS-TP-SGL-5-1	UCSS for UCM for One Year - 1 user	\$ 228.00
L-UCSS-TP-SGL-1M-1		\$ 6.00
CUCM Multiple Screen TelePresence User License UCSS Options		Pricing
L-UCSS-TP-MULT-1-1	UCSS for UCM for One Year - 1 user	\$ 110.00
L-UCSS-TP-MULT-2-1	UCSS for UCM for One Year - 1 user	\$ 187.00
L-UCSS-TP-MULT-3-1	UCSS for UCM for One Year - 1 user	\$ 231.00
L-UCSS-TP-MULT-5-1	UCSS for UCM for One Year - 1 user	\$ 385.00
L-UCSS-TP-MULT-1M-1	UCSS for UCM for One Year - 1 user	\$ 10.00

9.2 Cisco MCS 7800 Media Convergence Servers

These servers are not applicable because these products are hardware.

9.3 Cisco Emergency Responder UCSS

For Cisco Emergency Responder, UCSS is ordered based on the total number of users or phones for which Cisco Emergency Responder is licensed. There are UCSS product part numbers for one-, two-, three-, and five-year terms (Table 65). There are also monthly UCSS product part numbers, which may be used to align UCSS for additional user licenses with the term of an existing UCSS contract.

Table 66. UCSS for Cisco Emergency Responder

Product Part Number	Description	List Price (\$US)
UCSS-ER	UCSS for Emergency Responder Top Level SKU	\$0
UCSS-ER-1M-10	UCSS for Emergency Responder for One Month - 10 users	\$2
UCSS-ER-1-10	UCSS for Emergency Responder for One Year - 10 users	\$20
UCSS-ER-2-10	UCSS for Emergency Responder for Two Years - 10 users	\$34
UCSS-ER-3-10	UCSS for Emergency Responder for Three Years - 10 users	\$42
UCSS-ER-5-10	UCSS for Emergency Responder for Five Years - 10 users	\$70

9.4 Cisco Enterprise, Business, & Department Attendant Consoles UCSS

Ordering UCSS Options for the Cisco Unified Department, Business, and Enterprise Attendant Consoles requires the use of the Dynamic Configuration Tool. After accessing the Dynamic Configuration Tool, enter “UCSS-ATT” and select from the following UCSS Product Numbers.

Note: Each Attendant Console requires one associated UCSS product number. For example, if a customer is equipped with 7 Cisco Unified Enterprise Attendant Consoles and requires 5 years of UCSS, then 7 UCSS Product Numbers (UCSS-ATT-CUE--5-1) must be ordered (Table 66).

Table 67. UCSS for Cisco Enterprise, Business, and Department Attendant Consoles

Product Number	Description	List Price (US\$)	UCSS Product Number	List Price (\$US)
CUD-ATT-CON	Product Code for the Cisco Unified Department Attendant Console	\$1,395	1 Year: UCSS-ATT-CUD1-1	\$262
			2 Year: UCSS-ATT-CUD2-1	\$445
			3 Years: UCSS-ATT-CUD3-1	\$550
			5 Years: UCSS-ATT-CUD5-1	\$917
			1 Month UCSS-ATT-CUD1M-1	\$22
CUB-ATT-CON	Product Code for the Cisco Unified Business Attendant	\$2,195	1 year: UCSS-ATT-CUB1-1	\$411
			2 years: UCSS-ATT-CUB2-1	\$699
			3 years: UCSS-ATT-CUB3-1	\$863
			5 Years: UCSS-ATT-CUB-5-1	\$1,438
			1 Month UCSS-ATT-CUB1M-1	\$35
CUE-ATT-CON	Product Code for the Cisco Unified Enterprise Attendant	\$2,950	1 year: UCSS-ATT-CUE-1-1	\$450
			2 years: UCSS-ATT-CUE-2-1	\$765
			3 years: UCSS-ATT-CUE-3-1	\$945
			5 Years: UCSS-ATT-CUE--5-1	\$1,575
			1 Month UCSS-ATT-CUE-1M-1	\$38

9.5 Cisco Unified Communications Manager Session Management Edition UCSS

Customers can order Cisco Unified Communications Software Subscription for Cisco Unified Communications Manager Session Management Edition. Cisco Unified Communications Manager Session Management Edition licenses are required for all managed sessions. Note that Cisco Unified Communications Software Subscription is sold on a per-user (per-session) basis and covers all client and server software or other product options available with that release. The pricing information for Unified Communications Software Subscription packages for Cisco Unified Communications Manager Session Management Edition is listed in Table 67.

Cisco UCSS-SME at \$0 is the top-level SKU for UCSS for Cisco Unified Communications Manager Session Management Edition (Table 67).

Table 68. UCSS for Cisco Unified Communications Manager Session Management Edition

Cisco Unified Communications Manager Session Management Edition 1-Year Software Subscription Product Part Number	Description	List Price (US\$)
UCSS-SME-1-1	UCSS for Unified CM Session Management Edition One Year - 1 session	\$5
Cisco Unified Communications Manager Session Management Edition 2-Year Software Subscription Product Part Number	Description	List Price (US\$)
UCSS-SME-2-1	UCSS for Unified CM Session Management Edition Two Year - 1 session	\$9
Cisco Unified Communications Manager Session Management Edition 3-Year Software Subscription Product Part Number	Description	List Price (US\$)
UCSS-SME-3-1	UCSS for Unified CM Session Management Edition Three Year - 1 session	\$11
Cisco Unified Communications Manager Session Management Edition 5-Year Software Subscription Product Part Number	Description	List Price (US\$)
UCSS-SME-5-1	UCSS for Unified CM Session Management Edition Five Year - 1 session	\$18
Cisco Unified Communications Manager Session Management Edition 1-Month Software Subscription Product Part Number	Description	List Price (US\$)
UCSS-SME-1M-1	UCSS for Unified CM Session Management Edition One Month - 1 session	\$1

10. Cisco Services

10.1 Cisco Unified Communications Services

Gain an accelerated return on investment for Cisco Unified Communications deployments with a resilient, converged network that meets business needs. Using the Cisco Lifecycle Services approach, Cisco and its channel partners provide a broad portfolio of unified communications services that address all aspects of network deployment, operation, and optimization.

Information about how to order Cisco Unified Communications Services can be found in the Cisco Services Ordering Guide at the following location:

http://www.cisco.com/en/US/partner/products/svcs/ps2961/ps2664/serv_group_home.html.

10.2 Cisco Unified Communications Services - Tools for Quoting and Ordering

Cisco Service Contract Center

Cisco Service Contract Center, the next generation of service management, helps you increase profitability and efficiency by simplifying the way you manage and sell your Cisco service contracts.

Now there is one simple and easy-to-use web-based solution you can use to quote and book your service orders and manage your service contracts and renewal opportunities. Cisco Service Contract Center helps you accelerate your business by allowing you to focus your attention on selling and on servicing your customers instead of waiting for reports, searching for information, reconciling prices, reentering quotes, solving problems, and cleaning up contracts.

Access the Cisco Service Contract Center at the following location: <http://www.cisco.com/public/scc/>.

11. Cisco Capital Financing

The significant benefits offered by Cisco Unified Communications make it the natural choice to replace traditional PBX systems. As with any technology investment, the question is the affordability of the new system. The answer is financing from Cisco Capital. Whether through flexible repayments matching expenditure to benefit, mitigating cash-flow problems, or negating capital expenditures with an operating lease, we can give you access to the right Cisco Unified Communications technology for your business, right when you need it.

11.1 Removing Sales Barriers:

Typically, Cisco Capital can help remove or reduce the barriers preventing organizations from obtaining the technology that can most benefit their businesses. Cisco Capital can:

- **Remove cash-flow problems**, allowing the company to spread the cost of its investment over a number of years.
- **Offer flexible repayment terms matching expenditure to benefits**, meaning that payments can be timed to coincide with business benefits that may be seen later in the project, or deferred to meet a company's budget cycle.
- **Turn capital expenditures into operating expenses** through an operating lease that enables companies to benefit from the residual value of the technology initially, and because no one knows Cisco equipment like Cisco, you can be sure of market-leading residuals.
- **Provide a sale and lease-back arrangement** (where available) that softens the initial costs by taking on existing commitments that may be attached to older equipment.

11.2 Tips for Taking Advantage of Financing to Accelerate and Close More Business:

- **Consider Financing Early in the Sales Cycle:** This financing will save time later and help get you paid faster.
- **Get Your Customer Preapproved for a Credit Line With Cisco Capital:** By showing customers they can afford more than they thought they could, you can pave the way early for growing the sale size. It is recommended you do this as early as possible in the customer discussions/sale cycle.
- **Provide a Lease Quote With Every Proposal:** You can provide a quote by contacting your local Cisco Capital team. And, in some markets web-based tools are available, so you can quickly generate your own lease quotes.

11.3 For More Information About Cisco Capital Financing, Visit:

<http://www.cisco.com/web/ordering/ciscocapital/index.html>.



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

CCDE, CCENT, CCSI, Cisco Eos, Cisco Explorer, Cisco HealthPresence, Cisco IronPort, the Cisco logo, Cisco Nurse Connect, Cisco Pulse, Cisco SensorBase, Cisco StackPower, Cisco StadiumVision, Cisco TelePresence, Cisco TrustSec, Cisco Unified Computing System, Cisco WebEx, DCE, Flip Channels, Flip for Good, Flip Mino, Flipshare (Design), Flip Ultra, Flip Video, Flip Video (Design), Instant Broadband, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn, Cisco Capital, Cisco Capital (Design), CiscoFinanced (Stylized), Cisco Store, Flip Gift Card, and One Million Acts of Green are service marks; and Access Registrar, Aironet, AllTouch, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Lumin, Cisco Nexus, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, Continuum, EtherFast, EtherSwitch, Event Center, Explorer, Follow Me Browsing, GainMaker, iLYNX, IOS, iPhone, IronPort, the IronPort logo, Laser Link, LightStream, Linksys, MeetingPlace, MeetingPlace Chime Sound, MGX, Networkers, Networking Academy, PCNow, PIX, PowerKEY, PowerPanels, PowerTV, PowerTV (Design), PowerVu, Prisma, ProConnect, ROSA, SenderBase, SMARTnet, Spectrum Expert, StackWise, WebEx, and the WebEx logo are registered trademarks of Cisco and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1002R)